

THE AMERICAN MONTHLY REVIEW OF REVIEWS

Edited by ALBERT SHAW



The Louisiana Purchase Exposition

By Frederick M. Crunden. Illustrated

St. Louis—A Strong Western City

By William Flewellyn Saunders
Illustrated

The Significance of the Louisiana Purchase

By
Prof. Frederick J. Turner

Mr. George Wyndham:
Champion of the Irish
Land Bill

By W. T. Stead. With Portrait

The German Municipal
Exposition

By George E. Hooker. Illustrated

A Forecast of Great Gather-
ings in 1903

Giant Ships for Our Orien-
tal Trade

By F. N. Stacy. Illustrated

Notes on the Spring Books

Illustrated

The Northern Securities Case, the Louisiana Anniversary, the Irish Land-Purchase Bill, Our Projects for Interior Waterways and Irrigation, and other timely and Important Topics are discussed in the Editor's "Progress of the World"

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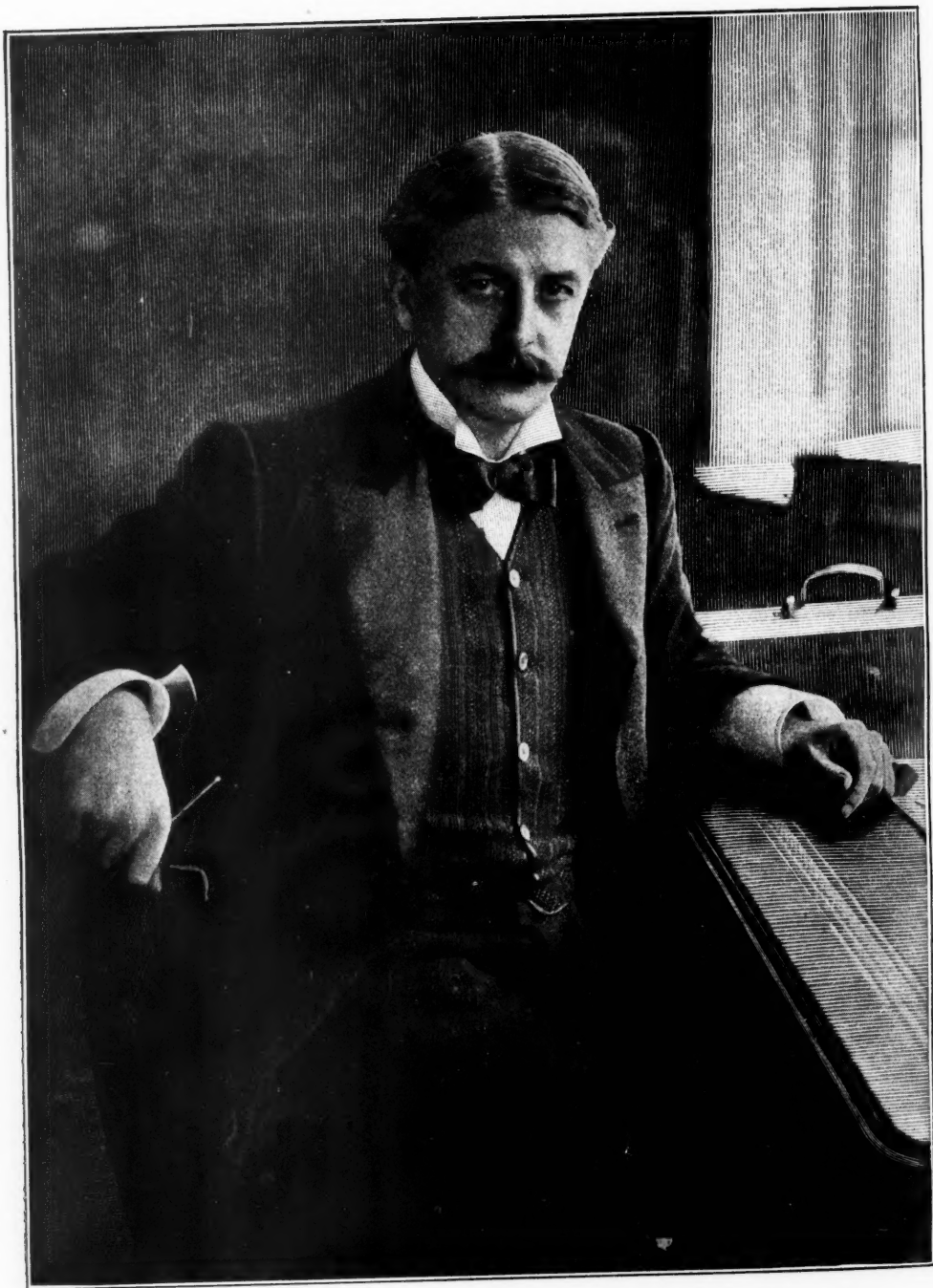
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MR. GEORGE WYNDHAM, AUTHOR OF THE IRISH LAND BILL.

THE AMERICAN MONTHLY

Review of Reviews.

VOL. XXVII.

NEW YORK, MAY, 1903.

No. 5.

THE PROGRESS OF THE WORLD.

A Notable Anniversary. The purchase of the Louisiana territory was consummated at Paris on April 30, 1803. So great an event has this purchase proved to be in its historical consequences that it seems well-nigh useless to try to lend impressiveness to it by comparing it with other historical events, or by making eulogistic phrases about it. Much has been written upon that first huge stride in the course of our national expansion. The very best condensed narrative and interpretation of it given us by any historical writer is to be found in the fourth volume of "The Winning of the West," by Theodore Roosevelt. It is, therefore, a pleasant coincidence that the author of that original and finely conceived historical work,—of the excellence of which one finds fresh proof upon every reference to it,—should now in his capacity as President of the United States take a leading part in the celebration of the one-hundredth anniversary of the treaty with France for the cession of Louisiana. Roughly speaking, the Louisiana Purchase comprised that great central section of the United States lying between the Mississippi River on the east and the Rocky Mountains on the west, and extending from the Gulf of Mexico to the British possessions on the north. Its greatest width at the extreme north was about a thousand miles; its greatest length, from the mouth of the Mississippi to the extreme northwestern point, was about two thousand miles. The narrowest portion was what is now the State of Louisiana,—Texas then being a part of Mexico, and, with California and the country west of the Rockies, a possession of Spain.

The Mississippi Outlet. The circumstances of this great purchase were very remarkable. They will be found well recapitulated in an article contributed to this number of the REVIEW by a well-known authority on American history, Prof. Frederick J. Turner, of the University of Wisconsin. In those days, when there were no

railroads and most of the country remained a wilderness, commerce was wholly a matter of transportation by water. We already possessed the eastern bank of the Mississippi River to a point below Natchez. We were shut off from the Gulf of Mexico by the narrow strip of West Florida fifty or sixty miles wide which at that time extended all the way to the Mississippi River, and by the projecting delta of the river which belonged to the Louisiana province. Our frontier settlers on the Ohio and in the region accessible to the Mississippi were clamoring for unrestricted navigation rights to the sea. The Louisiana province had been ceded by France to the Spaniards, who also held the Floridas, in 1765. We had succeeded in making a temporary arrangement with the Spaniards which gave us certain rights of passage, and particularly of landing and storing goods at New Orleans. This arrangement was reported as withdrawn at the very time when it came to be known that by a secret treaty the Spanish Government had transferred Louisiana back to the French. The Americans had believed they could deal with the Spaniards, and eventually have their own way about the use of the mouths of the river. But they regarded France as incomparably more formidable, and so our settlers in the Southwest were very much disturbed.

A Napoleonic Real Estate Deal.

Meanwhile, the French had not yet taken possession at New Orleans, for they were at that time painfully and disastrously engaged in the endeavor to put down the revolt in Haiti. Under these circumstances, President Jefferson instructed our minister at Paris, Mr. Livingston, to try to purchase the east bank of the Mississippi to its mouth, this purchase including the town of New Orleans. The total amount of land asked for was comparatively a mere speck on the map,—a bit of marsh and sand off the extreme end of West Florida, and the margin of delta land that lies



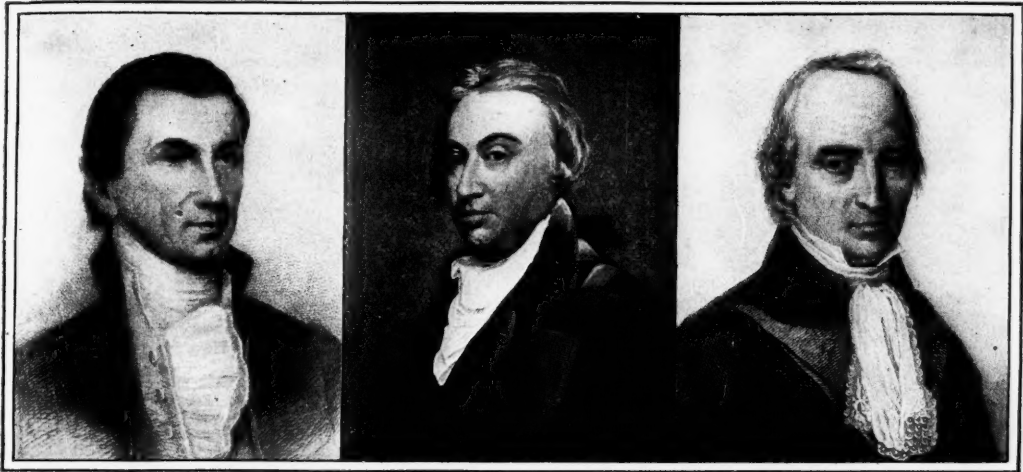
THE SHADED PART OF THE MAP SHOWS THE EXTENT OF THE LOUISIANA PURCHASE OF 1803.

east of the main channel of the Mississippi between Lake Pontchartrain and the river's mouth. Mr. Livingston's negotiations seemed to be wholly fruitless, and at length President Jefferson quietly sent James Monroe as a special envoy with authority to treat at Madrid as well as at Paris, and with instructions to buy New Orleans and the river outlet for \$2,000,000. Suddenly, to the great surprise of Messrs. Livingston and Monroe, Napoleon proposed through Marbois, his finance minister, to sell us not merely New Orleans, but almost a million square miles of country, nearly all of which had never been seen by a white man. Napoleon was now determined that the United States should take over the whole French territory, even as he had formerly been determined not to sell the marginal strip on the east bank of the river.

And having made up his mind to sell, he was not willing to lose any time about it. The American commissioners had no instructions to buy, and there was no Atlantic cable or swift steamship service by which they could communicate with the Government at Washington. When ninety-five years later the American peace commissioners at Paris concluded to buy the Philippine Islands from Spain, they acted under instructions received daily and almost hourly from President

*The Boldness
of Monroe and
Livingston.*

McKinley at Washington. But Mr. Livingston of New York and Mr. Monroe of Virginia took their chances, fixed the pecuniary terms of the bargain, and signed offhand a treaty of territorial acquisition which doubled the domain of the United States. They signed this treaty on April 30, and nobody in the United States had any inkling of the matter for more than two months. The treaty was broad and comprehensive in its provisions. At the moment of its signing, there were also signed two other treaties, one of which agreed that the United States should pay France 60,000,000 francs, while the other provided that three or four million dollars' worth of outstanding American claims against France should be paid off by the United States Treasury. These two items taken together amounted to about fifteen million dollars, and were regarded as being in consideration of the cession of the Louisiana country. The first article of the treaty asserts the fact that there had been a retrocession of "the colony or province of Louisiana" from Spain to France by a treaty of October 1, 1800; then it declares that whereas "the French Republic has an incontestible title to the domain and to the possession of the said territory: The First Consul of the French Republic desiring to give to the United States a strong proof of his friendship, doth hereby cede to the United States, in



James Monroe.

Robert Livingston.

Barbé Marbois.

THE SIGNERS OF THE TREATY CEDING LOUISIANA TO THE UNITED STATES.

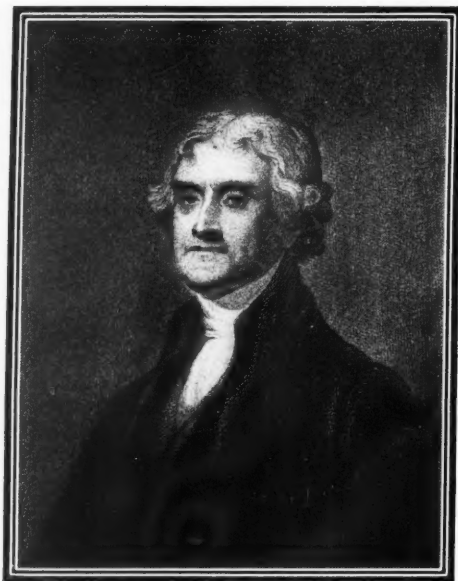
the name of the French Republic, forever and in full sovereignty, the said territory, with all its rights and appurtenances, as fully and in the same manner as they have been acquired by the French Republic, in virtue of the above-mentioned treaty concluded with His Catholic Majesty."

The Real Hero Was the American Pioneer. Mr. Roosevelt in his "Winning of the West" declares that the Louisiana Purchase was not the work chiefly of the statesmen and diplomatists of the Jefferson administration, nor yet of Napoleon and his advisers. In page after page of fact and argument, he finally proves incontestably that the Louisiana Purchase was the result of the energy and spirit of the American pioneers of the Southwest. Napoleon had intended to maintain and develop the French colonial empire in America, but circumstances had rapidly and wholly convinced him that the thing was impossible. He had received reports which showed both the disposition and the capacity of the American frontiersmen. These pioneers were determined not to allow New Orleans to pass from the comparatively inert Spanish Government to the powerful control of France, and Napoleon was convinced that sooner or later the frontiersmen would open the Mississippi River and control New Orleans in spite of all that he could do. He was advised how strong an influence the new settlements of the Southwest had in the political party of which Jefferson was the leader and the exponent, and he had come to think it probable that if he should undertake

to hold the mouths of the Mississippi as against the clamor of the Americans he would inevitably drive the United States into an alliance with England, in which case he would certainly be deprived of Louisiana, not to mention dangers in other quarters. With Napoleon, to perceive was to act. The undeveloped regions of the upper part of the Louisiana Purchase were of no interest to him if France was to lose her preëminence in the Gulf of Mexico and her hold in the West Indies. Thus, it seemed best to him, not merely to sell New Orleans, but to sell the whole of the Louisiana country, to the United States. Mr. Roosevelt says that in any case our pioneers would inevitably have settled, developed, and acquired the trans-Mississippi country. But it was high statesmanship on Napoleon's part to perceive the inevitable, and it was splendid courage and broad vision that actuated Livingston and Monroe when they made the bargain and signed the treaty.

Jefferson's Interest in the West.

Fortunately, they could count upon President Jefferson's ardent backing at home. Jefferson for many years had been one of the very few Americans who had felt a scientific interest and curiosity in the idea of an exploration of the great Indian country of the Northwest, which, though belonging nominally to Spain, had never been traversed by a Spaniard. At the very time when, unknown to him, his representatives at Paris were purchasing that northwestern wilderness for the United States, Jefferson was arranging for a notable tour of exploration under the leadership



President Jefferson.



Napoleon Bonaparte.

THE CHIEF FIGURES IN THE LOUISIANA PURCHASE.

of his private secretary, Capt. Meriwether Lewis, of Virginia. A good many years earlier, Jefferson had been interested in the project of an American traveler who had proposed to go up the Missouri River as far as possible by row-boats and canoes, and then across the mountains to the headwaters of the Columbia, or of some other stream that emptied into the Pacific, and thus down to the western coast of the continent. There were already some American settlements in the Missouri valley above the French village of St. Louis, and certain trading treaties had been made with the Indians on behalf of American citizens. The time had come for a renewal of governmental action on this matter of Indian trading, and this gave occasion for the expedition which Jefferson was fitting out under the leadership of Captain Lewis, with his friend Captain Clark, also of Virginia, as his colleague. Mr. Jefferson had himself drawn up very complete instructions for this expedition, and Captain Lewis was about to leave Washington for Pittsburg, and thence to float down the Ohio River to St. Louis, to make his start across the unknown wilderness, when the startling news arrived of the Louisiana Purchase. Jefferson himself tells us that news of the Louisiana Purchase was received at Washington about July 1, and that Captain Lewis started on the 5th under new conditions that infinitely enhanced the importance of the project of exploration.

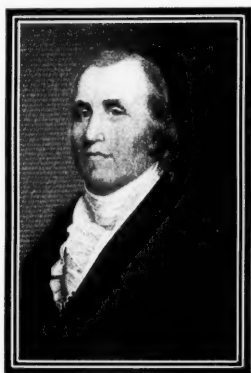
The Lewis and Clark Expedition.

The fact that Captain Lewis was to explore what had now become our own domain lent a vastly increased interest to his undertaking. Delays incident to what was then a long, tedious journey to St. Louis made it impracticable to get the expedition of twenty-five or thirty men fairly started on its work until the following spring. The winter of 1804-05 was spent with the Mandan Indians on the Missouri River, in what is now Dakota. The summer of 1805 found the expedition safely descending the Columbia River. The projected Lewis and Clark exposition to be held at Portland, Ore., in 1905, a year after the Louisiana Purchase Exposition at St. Louis, will, therefore, come at the proper time for the celebration of the one-hundredth anniversary of this remarkable exploration. To make it as sure as possible that the news of the journey should be received, Jefferson had provided that some members of the party should return by sea, the coasts of the Oregon country being frequented by merchant ships in the fur trade. Messrs. Lewis and Clark, and most of the party, however, returned across the wilderness, varying their route somewhat, and traversing regions that President Roosevelt visited last month. They reached St. Louis in September, 1806. The whole country rang with their fame, and few Americans ever more fully deserved the approval of their countrymen. They had shown

quite the same qualities of energy, capacity, and intelligence, together with entire modesty, that had belonged to Washington in his early career as surveyor and Western explorer. They had shown marvelous ability in managing the Indians, and they had been able to make friends with the most warlike tribes.

*A Brilliant
Page in Our
History.*

It is to be hoped that this centenary period will incite thousands of young Americans to read about the intrepid explorers of the Louisiana Purchase. Captain Lewis was promptly rewarded by being made governor of the great Louisiana territory, while Captain Clark was made a general of the Louisiana militia and the agent of the United States for Indian affairs throughout the Louisiana country,—these two offices being the most important ones relating to the Louisiana Purchase then in the gift of the Government. Unfortunately, Captain Lewis' death occurred two or three years afterward, at a time when he was about to prepare for publication his and Captain Clark's journals of their great expedition. The materials were placed in the hands of Mr. Paul Allen, of Philadelphia, who, with the aid of Captain Clark and other members of the party, brought out, in 1814, the classical work entitled "The History of the Expedition Under the Command of Captains Lewis and Clark to the Sources of the Missouri, Thence Across the Rocky Mountains and Down the River Columbia and to the Pacific Ocean, Performed During the Years 1804-05-06 by Order of the Government of the United States." This work was republished a few months ago in two volumes in excellent form by Messrs. A. C. McClurg & Co., of Chicago, with a brilliant introduction by Dr. James K. Hosmer. An edition in three smaller volumes has also appeared lately from the press of the New Amsterdam Book Company. Dr. Elliott Coues' elaborately annotated edition of ten years ago is out of print. Dr. Hosmer's little volumes on the "Louisiana Purchase" and the "Mississippi Valley" are to be commended to general readers interested in this subject, as is Professor Sparks' volume entitled "The Expansion of the American People." But best of all, in our opinion, is

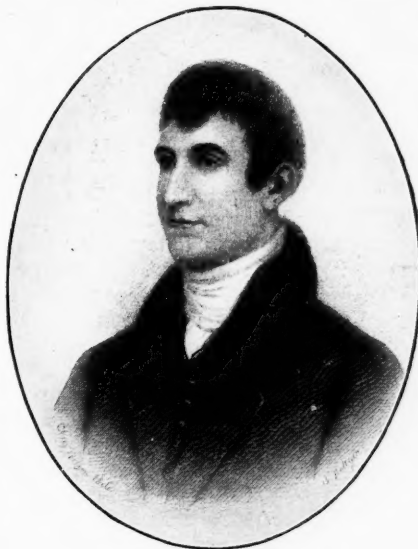


CAPT. WILLIAM CLARK.

Theodore Roosevelt's "The Winning of the West," and in particular, as relating to this period, the fourth volume. For an elaborate study of the diplomatic history of the Louisiana Purchase, the works of Mr. Henry Adams are to be consulted as the highest authority.

*What We
Have Done
with the Pur-
chase.*

To the Louisiana Purchase we owe three tiers of States. In the first tier are Louisiana, admitted to the Union in 1812; Missouri, in 1821; Arkansas, in 1836; Iowa, in 1846, and Minnesota, in



CAPT. MERIWETHER LEWIS.

1858. In the second tier are Kansas, admitted in 1861; Nebraska, in 1867; North Dakota and South Dakota, in 1889, and Oklahoma, which, with its complement of the Indian Territory, will be admitted in the near future. In the third tier are Colorado (the eastern part of which belonged to the Louisiana Purchase), admitted in 1876; Montana, admitted in 1889, and Wyoming, admitted in 1890. These States now include the most important wheat and corn producing areas, not only in the United States, but in the whole world. The southern part of the region is famous for cotton as well as for other products, and millions of farmers as prosperous as any in the world live in the great States of Iowa, Minnesota, Kansas, Nebraska, and Missouri. Scores of thousands of miles of railroad lines form the highways of commerce for the fifteen millions of people who now occupy the wilderness bought by Jefferson and his agents and traversed by Lewis and Clark. The

great railway systems involved in the Northern Securities case last month lie for the most part within the Louisiana Purchase territory. The village of St. Louis has become a splendid metropolis, which in the near future will have a million people. The little town of New Orleans has become a beautiful and famous city. From Minneapolis and St. Paul on the eastern edge of the Louisiana territory to Denver near the western edge, prosperous towns and cities have sprung into being. Progressive institutions of education are found everywhere, and a population of very high average character occupies these commonwealths and feels the same degree of local pride, and affection for home environment, as communities elsewhere that cherish a much longer history.

*Railroads
as Later
Pioneers.*

The greater part of this development of the Louisiana Purchase country has taken place since the ending of the Civil War. Whereas in the older parts of the country the railroads followed the work of settlement, it is peculiarly true of the greater part of the Louisiana Purchase country that railroads have been the pioneers, and that the settlers have followed to cultivate the land and build the towns along the lines of steel highway. It was this fact that enabled the trans-Mississippi country suddenly to take so enormous a part in the supply of the markets of the world with breadstuffs and meat. For six or seven years past, these States have enjoyed a period of agricultural prosperity that can probably not be matched in the history of any country at any time; and the present year promises to be as prosperous as its predecessors. The Louisiana Purchase Exposition at St. Louis proposes, indeed, to be a world's fair of the first magnitude; but it must above all else illustrate the marvelous development of the territory whose acquisition it is meant to celebrate.

*St. Louis and
Its Celebra-
tions.*

We are publishing in this number an article from Mr. Crunden, the well-known librarian of St. Louis, on the plans and prospects of the exposition, together with an article on the city of St. Louis itself, from the pen of Mr. Saunders, of the Business Men's League of that city. The St. Louis Exposition comes eleven years after the World's Fair at Chicago. The great West has made its longest strides in this short period. Much of human interest has happened to the world even since the Paris Exposition of three years ago. An important exposition might be made which should include nothing but new inventions or improvements and changes that belong to the

period since the World's Fair at Chicago. The celebration on April 30 was designed at once to commemorate the Louisiana Purchase and to dedicate in a formal manner the grounds and palaces of the exposition, now rapidly advancing toward completion, though not to be opened until next spring. The principal speakers provided for April 30 were President Roosevelt and ex-President Cleveland. May 1 was to be celebrated as Diplomatic Day, with addresses by the French representative, M. Jusserand, and the Spanish minister, Don Emilio de Ojeda. May 2 was to be Governors' Day, Governor Dockery of Missouri welcoming the guests of many of the States East and West, for whom Governor Odell of New York was expected to respond. The invited guests for these three days included a great array of executive, legislative, judiciary, and diplomatic officials.

*Western Pros-
perity and Its
Diffusion.*

The prosperity of Western farmers is a vital factor in the making of good times for the country at large. It keeps the railroads prosperous, and it has lately been giving them an unprecedented volume of traffic both ways. This prosperity of the railroads, in turn, distributes itself very widely. It has enabled the organized railway employees to demand better wages and conditions with marked success. On almost every line of road in the country there have been recent advances of 10 or 15 per cent. in the pay of employees. Increased business and earnings have also justified the roads in the making of extensive betterments; that is to say, in improving grades, relaying tracks, converting single-track into double-track lines, and the like. Such work gives employment at good wages to many thousands of unskilled laborers. Furthermore, the immense volume of traffic is obliging all the roads to buy more engines and cars, and thus all the establishments for the manufacture of rolling stock and railroad supplies are working to the full extent of their capacity. It is easy to see how this prosperity of the farmers and of the people who directly or indirectly serve the railroad system must extend itself to the textile industries of the East and to general manufactures and trade;—for when American farmers, railroad men, and mechanics are prosperous, they live well because their standards are high, their wives are intelligent, and they are ambitious for their children.

*Good Times
and What
Makes Them.*

Thus, the widest possible diffusion of prosperity is the best possible safeguard for the continuance of prosperity. Hard times in the old days used to be attributed most commonly to so-called "over-

production" and the "glut of the market." But there is no particular danger of an overproduction of shoes, for example, if the people who want shoes are able to buy them. The shoemakers and cloth-makers of the factory towns want bread and meat as well as clothes and shoes. The farmers, on the other hand, want clothes and shoes as well as bread and meat. With all parts of the great producing and distributing system working harmoniously, why should there be any serious period of hard times except as the result of widespread crop failures or of such a national calamity as war or pestilence? Those who have most to say against the great corporations and "trusts" must in candor admit that the general industrial life of this country has never before been so well adjusted as it is at the present time. For a number of years, the current of prosperity has moved swiftly, but steadily and safely. The reaction that the pessimists have been predicting as just ahead does not arrive. There have of late been some evidences of an unwholesome speculative tendency, and there will be a great deal of loss in particular localities through credulous investment in wildcat stock-jobbing schemes on the part of people who hope to make money out of distant gold and copper mines, phantom coffee plantations, and other bogus enterprises. But these are mere eddies in the present great stream of economic life, and do not affect the main current.

*The
Present
Tendencies.*

The largest speculative tendency has shown itself in the advance in the prices of Western farm lands, which in some districts have doubled or quadrupled. This movement, however, has not gone very far beyond the bounds of safety and moderation. A good many millions of dollars of the surplus of our own farmers has gone rather too hastily into the purchase of Canadian wild lands, partly for actual settlement, but more largely for speculation. Much of this money could have been better invested at home. The railroads, with their union in large systems, are carrying on the country's transportation business in a far better way than under the conditions that prevailed twenty or even ten years ago. In many of the large industries, particularly in iron and steel, the methods of the great corporations and trusts bring about a steadiness of production and supply and an evenness of price that are highly beneficial to the country, and that largely diminish the danger of oscillation between good times and bad times. The improvement in the conditions of the money-supply and the banking business also renders us far less liable than we were

ten years ago to those sharp disturbances in what the business world knows as "credit," which have in the past been perhaps more responsible than anything else for the periods of industrial depression which have followed financial panics.

*Labor and
Capital on
Better Terms.*

Although from the newspaper headlines and the constant reports of threatened or impending strikes the casual reader might get the notion that we are living in a period of fearful strife between capital and labor, the facts are quite otherwise. Organized capital and organized labor are coming into a fairly good working understanding in this country. The settlement of a threatened strike on the great Wabash Railway system is a good example. In March, Judge Adams, of the United States Court at St. Louis, had granted a temporary injunction restraining the men from tying up the Wabash lines by a strike. Early last month, Judge Adams dissolved this injunction on the ground that the management had not made good its charges against the men; and he advised the parties in controversy to arbitrate, and thus exhibit to an expectant public "another instance of rational and intelligent adjustment of a business difficulty." The matter ended in a wondrous exhibition of sweet reasonableness on the part of the high officials of the Wabash system and the representatives of the employees. Statements made after the settlement on both sides were remarkable for their expressions of respect and good-will. The men gained liberal advances in wages and improved conditions in other respects. A strike of great proportions seemed inevitable on the New York, New Haven & Hartford system. At the root of the trouble was the refusal of the management of the road to deal with joint committees of the employees. The directors of the road finally overruled the management, and the result was that a representative committee of the employees met the men representing the ownership and operation of the road, and differences were soon adjusted, the men receiving substantial gains in wages and other conditions, as in the Wabash case.

*The Anthracite
Situation.*

These are good illustrations of a general tendency between capital and labor to maintain complete organization on both sides, and to settle differences by direct conference on a frank and straightforward basis. The very slightest disposition to act in this way on the part of the anthracite roads would have averted the great coal strike of last year. With the arrival of mild weather, the temporary reasons for the large increase in the price of anthracite coal had wholly disappeared.

There was an ample supply available, and no change in the conditions of production could have justified a permanent increase of more than a few cents a ton. But the anthracite monopoly, which absolutely fixes prices and controls the output, and holds the market firmly in its grasp, has ordained that the price shall for the present year remain at a scale fully a dollar a ton higher than a year ago. The monopoly had already advanced prices to a scale which would amply have justified the payment of better wages to the miners without increasing the cost of fuel to the public. This anthracite combination violates more laws in more different ways, probably, than any other trust or combination in the country. It is one of the few great organizations that makes its money, not by the introduction of economies in production and distribution, but solely by extortion from the public through the fact that it has secured a monopoly control of an article of necessary use. If the Northern Securities Company, with its control of the railway lines of a great part of the wheat-producing area of the country, had taken advantage of its position to oppress the farmer, on the one hand, and to increase the cost of the public's bread-supply on the other hand, we should have had a condition somewhat analogous to that which has resulted from the relations of the coal-carrying roads to the production and supply of fuel in the eastern part of the country. The mischief has arisen principally from the entrance of railroads, which should have been confined to the business of carriers, upon that of coal miners and dealers.

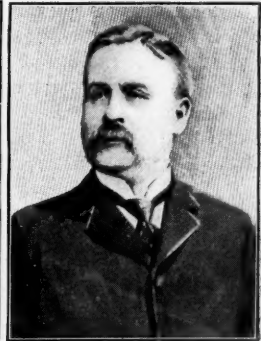
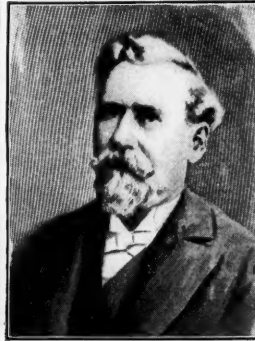
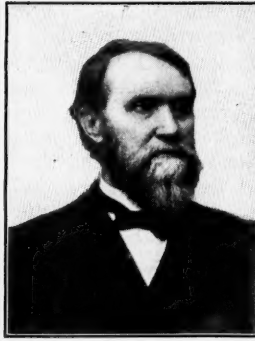
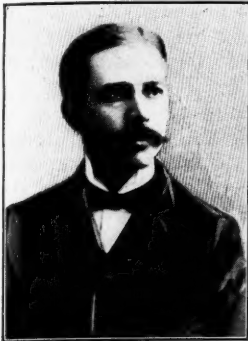
*Northern
Securities
Decision.*

The law passed in February to expedite the trial of suits against combinations under the Sherman anti-trust law had the result of bringing about an unexpectedly early decision in the great case of the United States Government against the Northern Securities Company. The case had been originally begun at St. Paul in the United States District Court for Minnesota; but under the new law it was taken at once to the Court of Appeals, four United States judges of the Eighth Circuit taking part in the trial. The arguments were heard at St. Louis, but the decision was handed down at St. Paul. The four judges on the bench were Caldwell, Sanborn, Thayer, and Van Devanter. The decision was an elaborate one, written by Judge Thayer, all his colleagues concurring at every point. Attorney-General Knox was sustained, and the Northern Securities Company was declared to be a combination "in restraint of trade" in the meaning of the Sherman Act of 1890, and therefore illegal and disqualified from performing the functions which

would otherwise naturally devolve upon it as owner of most of the stock of the Northern Pacific and Great Northern Railroad systems. Although the financial world had long been well aware that the Northern Securities case might have just this result, the decision brought, nevertheless, a rather serious shock, because of the vast interests directly or indirectly affected by it, and particularly because of the widespread impression that the principles set forth by Judge Thayer might apply with even greater force to a considerable number of other railroad mergers and consolidations. There might have been a panic, but there was not. Prices fell a little in Wall Street, where they had been too high. The soundness of the business situation was revealed by conditions which might otherwise have brought on a colossal smash-up.

*Bearings of
the Case.*

The bearings of the Northern Securities case were somewhat fully discussed in these pages at the time when the suit was brought (see our number for April, 1902); but it may be well to recapitulate a few of the more salient points. By dint of marvelous enterprise and of ability rising to the measure of genius, Mr. James J. Hill had created the Great Northern Railway system, with its principal eastern terminals at St. Paul, Minneapolis, and Duluth, and had pushed a new transcontinental line across North Dakota and Washington to deep-water ports on Puget Sound. In due course of time, the bankrupt Northern Pacific came under the virtual control of the Great Northern, and Mr. Hill's masterful mind was felt in the unifying and harmonizing of transportation interests throughout the Northwest from the Great Lakes to the Pacific. Two years ago, these two systems the Great Northern and the Northern Pacific, went into partnership to purchase the stock of the Chicago, Burlington & Quincy system, which they finally succeeded in accomplishing. The Burlington stock, of which there was about \$100,000,000 par value outstanding, was paid for at the rate of \$200 a share by the issue of about \$200,000,000 of 4 per cent. Burlington bonds, which were guaranteed jointly by the two purchasing railway systems. Thus, what came to be commonly known as the Hill group of railways comprised the main lines and various subsidiary systems of the Northern Pacific, the Great Northern, and the Chicago, Burlington & Quincy. Meanwhile, Mr. Hill and his associates were building great ships to add to their fleets on the Pacific Ocean (see page 565) and on the Great Lakes, and were projecting various railway feeders and connecting links to heighten the efficiency of their immense network of railroads.



Judge Willis Van Devanter.

Judge Henry Clay Caldwell.

Judge Walter H. Sanborn.

Judge Amos J. Thayer.

THE FOUR CIRCUIT JUDGES WHO TRIED THE NORTHERN SECURITIES CASE.

*What is
the N. S.
Company?*

In order to bring about these huge material developments with the greatest possible assurance of stability of financial control, a new company was formed called the Northern Securities Company, not to operate railroads, but to hold a controlling interest in the stocks of the two transcontinental lines which had gone into partnership in the purchase of the Burlington, and which were proposing to conquer Oriental trade for America. The Northern Securities Company was to secure, by purchase or exchange, as much as possible of the stock of the Great Northern and Northern Pacific companies. It actually secured and now owns about 98 per cent. of the Northern Pacific stock and about 76 per cent. of the Great Northern stock. Mr. Hill is president of the Northern Securities Company, and Mr. J. P. Morgan and other leading financiers are associated with him as directors of the enterprise. The railroads themselves have maintained their distinct boards of directors, and have been operated quite as separately as they were before the majority interest in their stocks had come into the hands of a single owner. But, of course, the Northern Securities Company was in position to dictate the election of directors and officers.

*Compete, or
Liquidate?*

The Circuit Court has now decided that the existence of this power in the hands of one owner is of itself an evidence of the intention to stifle competition and restrain interstate trade and commerce. Hence their decision, which forbids this owner of the stock to vote at stockholders' meetings, and which also forbids the Northern Pacific and Great Northern railroads to pay dividends to this present owner of the property. These are certainly momentous practical results. There is no question as to the actual ownership of the

railroads. The shares of stock have been honestly bought and paid for by a purchaser who had a valid right to buy railroad stocks. The offense of the Northern Securities Company—according to the recent decision—lies in a motive which the court gets at by an inference. This motive, in the opinion of the four learned judges, is the suppression of competition between the Northern Pacific and the Great Northern lines, and the restraint of interstate trade and commerce. The court infers that there had previously existed “a natural law of competition,” the working of which disappears when a single owner comes into control of two more or less parallel lines of railroad. In legal theory, this may be true. In economics and in practical business, it long ago ceased to be a fact. The Great Northern and Northern Pacific had not for twenty years been competing lines in the sense in which the court discusses the subject.

*An Obsolete
Theory.*

The law of competition is not the controlling principle in running railroads, because experience has fully demonstrated, in the sphere of certain supply services like transportation, that it is impossible to make the law of competition work to economic advantage. What transportation companies want is the steady chance to earn as much money as possible for their stockholders. They found out a good while ago that they could do better by agreeing with one another than by rate-cutting and fighting. In the old sense of the term, competition in such services is obsolete in theory as well as in practice. There is a new sense, however, in which competition is more healthily keen and active under modern conditions of common ownership than under the old conditions. Thus, undoubtedly, it would have been more and more the policy under the influence of

the Northern Securities Company to develop a spirit of keen emulation, or rivalry, between the active managements of the two transcontinental lines, in order to promote the highest possible efficiency and the largest earning capacity. It is this sort of competition that the United States Steel Corporation has introduced with striking results, its object being to bring its less successful mills up to the standard of its most efficient ones. The idea that the public can in any way be profited by railroad rate wars and the old-time clashing competition, is a complete fallacy.

*Appealed to
the Supreme
Court.*

The Circuit judges deemed it their duty to interpret the law of 1890 as they found it, being guided by certain previous decisions of the Supreme Court in the interpretation of that act. The Supreme Court had already decided that an agreement among competing railroads as to freight rates was just as illegal when beneficial to the public as when harmful. Thus, to illustrate the principle, an understanding among the railroads to reduce wheat rates for the benefit of the farmers and the consuming public would be, according to the courts, an act in restraint of trade. Now, in the case of the Northern Securities Company, it is held, not that any acts in restraint of trade have occurred, but that the power exists to commit such acts. It is not likely that Congress, in passing the Act of 1890, supposed that it could be construed in just this fashion. These judges of the Circuit Court are men whose legal and judicial ability is universally recognized. It is not regarded as probable, therefore, that the Supreme Court, to which the case goes on appeal, will reverse their opinion. It is desirable that the Supreme Court should pass upon the matter at the earliest possible date. Owing to the nearness of the long summer vacation, however, it is not likely that a conclusion can be reached until some time in the course of the autumn term of the court.

*How to Get Out
of a False
Position.*

There are two ways out of the present false position in which the business

of the country has been placed by the federal attempt to regulate it. One way is for the Supreme Court to retrace its steps and admit a fundamental mistake in the decision of the Trans-Missouri Freight Association case. The other way—and probably the wiser and better one—is for Congress to amend the laws and relieve them of the ambiguity that has enabled the courts to put upon them the present destructive interpretations. The whole matter turns upon the meaning of the phrase “in restraint of trade.” It was the common understanding of the country that this phrase as used in the Sherman Act meant an unreasonable or a harmful exercise of power; and this view was taken by almost half of the members of the Supreme Court, whose powerful dissenting opinion in the Trans-Missouri case, prepared by Justice White, represented four judges as against five who gave the interpretation that the Circuit Court has now followed. In principle, this decision attempts to bring the whole power of the Government of the United States to block the modern tendency of business. It would be an almost unspeakable calamity to have our transportation methods thrown back to that chaos that existed in the old era of competition which the tone and sentiment of this latest



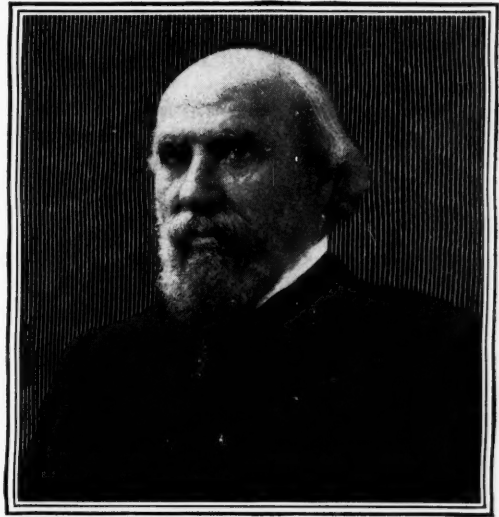
IS UNCLE SAM A WRECKER?

From the Ohio State Journal (Columbus).

court decision seem to extol. It would be a reversion to that period of ignorance of economic principles in which it was supposed that the way to get cheap gas was to encourage rival gas companies to lay their mains in the same streets, and that the way to get good street-railway service was to have competing lines on alternate parallel streets; or else, as in the case of a large number of instances in the United States, actually to allow rival companies to lay their tracks on the very same public thoroughfares.

*Smashing
versus
Regulating
Combinations.*

Now that our business life is coming more and more under the cognizance of statutes and the judiciary, and that the courts are exercising an ever-widening authority in their interpretations, it is highly important that judges who desire to protect the public in the economic sphere should themselves comprehend economic laws and principles. If this recent decision had been content to base itself simply upon the fact that inferior courts were practically bound by the previous interpretations of the Supreme Court, there could have been no ground of criticism. But, unfortunately, there breathes throughout this decision a certain air of having accomplished a good day's work in breaking up a railroad combination; and between the lines there seems to be a strong invitation for others to go and do likewise, and smash the combines generally. There is hardly a railroad system or combination in the country that could stand the test under this Northern Securities decision; and there are probably hundreds of industrial enterprises and combinations that are open to condemnation on the same ground,—namely, that they are powerful enough to influence prices or affect the course of trade in their particular directions if they should choose to do so. Stripped to its logical essence, this decision says that it is unlawful to attain any position of influence or power in interstate commerce, because that position might at some time be harmfully exercised. As Justice White put it in dissenting from the decision in the Trans-Missouri case, it meant in the ultimate analysis "that there must be no trade." It is plain enough that the courts, in construing the law, have brought themselves and the business of the country into a sort of cul-de-sac. The modern business principle is not that large industrial combinations should be broken up, but that they should be so regulated as to prevent them from doing any act of harm or oppression. As for railroads, the remedy lies in the direction of legalizing pooling arrangements, agreements, and combinations, accompanied by marked increase, on the other hand, of



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MR. JAMES J. HILL.

the direct authority of the Interstate Commerce Commission, or some other public body, to enforce fair and equitable rates.

*The
Immediate
Situation.*

As to the immediate practical effect of the Northern Securities decision, in case of its being affirmed by the Supreme Court, nothing whatever will have been accomplished that can in any way benefit the people who live in the States traversed by the Great Northern and Northern Pacific systems. As Mr. Hill puts it, the railroad properties will stay where they are, their earning capacity will not be affected one iota, and their ownership will remain in the hands of the same people who now control them. It would seem practically impossible that they should henceforth drift apart into the hands of mutually antagonistic cliques of directors. We have entered upon a period of harmonious railway management. It may indeed turn out that the amalgamated systems of the United States may come under one great controlling federation as a preliminary step toward passing over to government ownership of railways. But it is not conceivable that the reverse process should take place, and that great systems and lines should break up into a multitude of petty competing units. Demagogues will try hard so to arouse public prejudice as to prevent Congress from dealing with these questions on their merits; but when the prosperity of the country is at stake, public opinion always in due time heeds wise instruction. Thus, the sound-money cause prevailed, and the free-

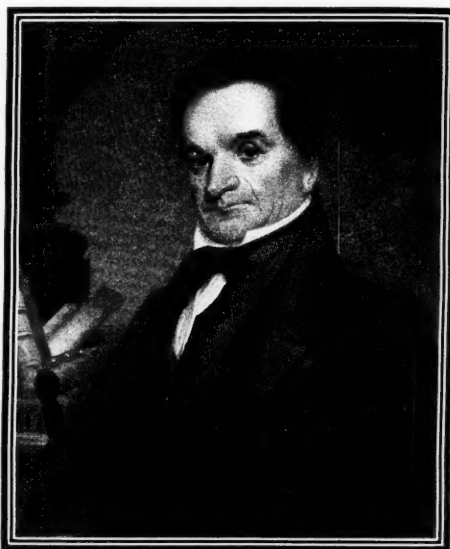
silver movement sunk below the horizon of practical politics. In like manner, the country will learn that it must not be swayed by mere prejudice against trusts and corporations, but must study such questions carefully, and deal with them upon their merits.

Some Names to Be Recalled This Year.

While the great citizen and statesman, Robert R. Livingston, who helped to buy Louisiana from Napoleon, was minister at Paris, a brilliant young American engineer and inventor,—namely, Robert Fulton,—was also living there; and in the very same year of the Louisiana Purchase, 1803, Fulton made his first successful steamboat experiment on the Seine, under Livingston's eye and patronage. It was this same Robert Livingston whose name will always be honorably associated with that of Fulton in the subsequent development of steam navigation on the Hudson River, and throughout America and the world. It is always interesting to recall the relationships existing between the great men and the great events of a given period. Thus, it is to be noted that the mayor of New York in 1803 was Edward Livingston, the younger brother of our minister to France. Edward was a brilliant and learned lawyer, who, though still young, had served with distinction in Congress, and already possessed influence and reputation. Just at this time, however, he was the victim of a great misfortune. A lot of public money for which he was responsible was stolen by a subordinate. He threw his entire fortune into the breach, and turned his back on New York with no impairment of honor or self-respect. Like the still more famous Aaron Burr, he had fallen under the fascination of the idea of fortune to be gained in the great new empire just bought from France. But he sought Louisiana in a totally different spirit from that of Burr.

Livingston in Louisiana.

He went directly to New Orleans, where in 1804 he began the practice of law. He took with him an unusual knowledge of Roman law and the principles of civil jurisprudence, and quickly became an authority upon the somewhat inconsistent tangle of Spanish, French, and other legal systems that existed in the Louisiana colony. It was he who effectively opposed the substitution of the English common law in Louisiana, and it was he who created the great Louisiana Civil Code, a world-famed monument of legal learning and practical statesmanship. In later years, he served as United States Senator from Louisiana, and as Secretary of State under President Jackson, who also sent him to France as United States min-



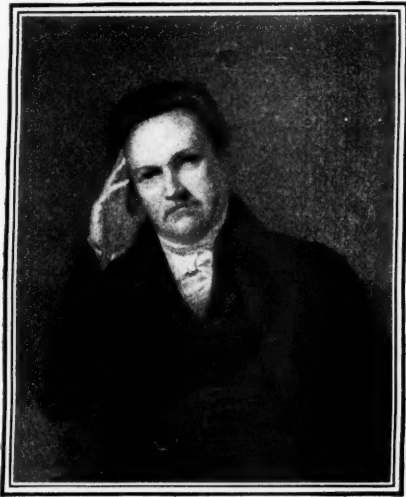
HON. EDWARD LIVINGSTON, OF LOUISIANA AND NEW YORK.

ister, where his position in the world of society and learning was as great as his diplomatic undertakings were successful. He died in 1836, at Rhinebeck-on-the-Hudson, and ought to be remembered as one of the greatest Americans in all the nation's annals, and a notable historical link between the Empire State and the great Louisiana country.

Clinton and the Erie Canal.

Livingston died in a period when steamboat navigation was making the two rivers that he knew so well, the Hudson and the Mississippi, the greatest highways of commerce in the country. He died, also, familiar with the vision of many canal boats on the Hudson River, the Erie Canal having been opened in the year 1825 to connect the Great Lake system with the Atlantic by means of a waterway from Buffalo, on Lake Erie, to the Hudson at Albany. Another young New York statesman, De Witt Clinton, was a United States Senator at the time, in 1803, when Edward Livingston was mayor of New York and Robert Livingston was in Paris buying Louisiana and backing Fulton in his steamboat experiments. De Witt Clinton was also ardently interested in the Louisiana Purchase, and was one of Jefferson's foremost supporters in the Senate when many of the Eastern members were opposed to the ratification of the great treaties of April 30, 1803. After Mayor Edward Livingston went to Louisiana, De Witt Clinton resigned from the Senate to take the place of mayor of New York City. He became

the foremost advocate of steam navigation, as he was also first in a number of projects for the public welfare ; and he made the construction of the Erie Canal the crowning achievement with which his name will always be identified.



HON. DE WITT CLINTON.
(Father of the Erie Canal.)

Governor Clinton's name comes freshly to the lips at this time, because the New York Legislature, which completed its annual session late last month, has adopted a measure which provides for a total modern reconstruction of the Erie Canal at an estimated cost of more than one hundred million dollars. We spoke of this bill in these pages last month as pending ; we may now mention it as duly passed by the Legislature and signed by the governor. There remains, however, the important formality of submitting to the people of the State, in November next, the question whether or not they will authorize the necessary bond issue for entering upon this colossal public improvement. Again, this act of 1903 associates itself with the Louisiana Purchase, because the canal enlargement is due wholly to the vast development of agriculture and industry in the northern part of the region acquired from France a hundred years ago. The wheat and flour, the lumber, the iron ore, and the other products that are shipped from Lake Superior ports, and that pass through the St. Mary's Canal out of Lake Superior to places farther east and south, now constitute by far the largest volume of water traffic passing any given point in the whole world. There will be business enough to justify all projected canal and railroad improvements.

*Waterways
and Cities.*

The city of Buffalo was created by the Erie Canal. The preëminence of New York in the nineteenth century over other Atlantic seaports was also due to the Erie Canal as the determining consideration. The rise of New Orleans in commercial importance in the nineteenth century was due to the creation of steam navigation on the Mississippi. The future commercial preëminence of New York City seems now destined to rest very largely upon the courageous project of spending a hundred million dollars to make the Erie Canal wide enough and deep enough to admit 1,000-ton barges, and thus meet modern traffic conditions. The future commercial greatness of New Orleans, in turn, seems destined to accrue in large part from the forthcoming creation of the Panama Canal,—also an enterprise determined upon by the United States Government in this centennial anniversary year 1903. The future commercial greatness of Chicago and St. Louis seems to be assured by all the conditions which promise to make the country itself great and prosperous. St. Louis, at the very heart of the country, will thrive with the further development of the resources of the Louisiana Purchase, and with the development of Texas and the other great districts subsequently acquired.

*The
Mississippi
River.*

It may yet be the case that without impairment of the prosperity of our vast network of railroads there may be marked recovery of navigation on the Mississippi River by two processes,—first, that of a further carrying out of plans for deepening and maintaining the navigable channel ; and, second, that of improvement in the types of steamboat and barge, and especially in engines, possibly also in the substitution of electricity for steam. It will be a boon to a rich and fertile portion of the Louisiana Purchase when methods shall have been perfected for more secure protection against floods. At large cost, there has been built up along the lower Mississippi extensive dikes or embankments, locally known as levees. In the springtime, when the Ohio, Missouri, and other tributaries of the Mississippi are unduly swollen by the spring freshets and the melting of snows in the mountains, the volume of water in the lower Mississippi is so great that it rises above the level of much of the country along its banks. It is hard to prevent the occasional breaking of the levees. The construction of reservoirs near the headwaters of some of the great tributaries, to impound the surplus of each freshet season, and to release it in the midsummer season of low water for the benefit of navigation, will perhaps furnish a partial remedy at

some future time. The problem as a whole is intricate, and its solution on an adequate scale may have to be postponed until the second centennial anniversary period of the Louisiana Purchase; but some solution will be found. The Father of Waters will submit to engineering control.

*Inundation,—
Mississippi
and Nile.*

The floods of the present spring have been exceptionally distressing along the lower Mississippi, and the losses to inundated farms and plantations have been fearfully large in the aggregate. It is surprising, however, to note how quickly those flooded regions recover when the water subsides. Their condition is not quite analogous to that of the Nile country, where inundation is wholly essential for moistening and enriching the soil of a rainless country. Nevertheless, the amazing richness of the Mississippi bottom lands is due in large part to the fertilizing sediment deposited in the times of overflow. Speaking of the Nile, the world at large has hardly realized how greatly the area of productivity along that river has been increased by the great public works due to the efficiency of the present English administration. The chief of these works is the great dam completed some months ago at Assouan. This holds back the waters of the fruitful stream to such good economic effect as to have doubled the cultivable area of Egyptian soil. Further projects at higher points on the Nile are to follow in due course of time.

*Governmental
Economic
Projects.*

These modern projects of economic improvement at governmental cost are expressed in financial terms that seem rather formidable; but where such undertakings are well thought out, the public credit may safely be invoked. Thus, the business conditions doubtless justify the enlargement of the Erie Canal, and the State of New York may wisely lend its credit to the project. The United States Government can finance the Panama Canal without adding the burden of a feather's weight to any citizen's load of taxation, for the simple reason that the canal tolls will easily pay the interest, and in due time pay off the principal of the cost of construction. Enhanced Egyptian prosperity will repay the cost of the Assouan dam several times over.

*Our Irrigation
Schemes.*

It is now announced that the irrigation projects of the United States Government in the far West are going to cost two or three times as much per acre of land redeemed as was estimated when the law was passed; but the Government will have no trouble at all in selling its irrigated lands for all

that it may cost to render them productive. The five irrigation projects first determined upon all involve striking and brilliant feats in engineering. In Montana, it is proposed to divert the St. Mary's River, which now flows through Canada to Hudson's Bay, by building a dam and digging a canal which will throw the water into the channel of the Milk River, and irrigate about a quarter of a million acres along that stream, which traverses a great extent of country in northern Montana. Projects in Colorado, Wyoming, Nevada, and Arizona are equally bold and striking in their character. There ought to be careful maps and models of these undertakings in the United States Government Building at the St. Louis Exposition. It will, indeed, be especially fitting that such subjects as irrigation, government forestry, river and harbor improvement, the work of the Western experimental stations of the Department of Agriculture, and various other kindred matters having to do with the development under public auspices of the resources of the great West, should be given a far greater prominence by the United States Government at St. Louis than at any previous exposition.

*The Irish
Land-Purchase
Bill.*

While in the United States we are this year undertaking to bring government aid to industry, trade, and agriculture by digging the Panama Canal, enlarging the waterways of New York State, investing millions in the irrigation of Western lands, and financing the transfer of the friars' lands to the peasantry of Luzon, the British Government is entering upon a scheme of land purchase greater in its financial magnitude than all these American projects put together. In short, the greatest event of the month under review in these pages has been the introduction of the Tory government's Irish land-purchase bill by the Secretary for Ireland, George Wyndham, and the enthusiastic acceptance of that measure by a great representative gathering of Irish people at Dublin. Mr. Wyndham's personality and career are described in an article from the pen of Mr. W. T. Stead which we publish elsewhere in this number. At a single stroke, this disciple of Mr. Balfour has risen from a secondary position to a place in the forefront of the world's statesmen. It is not that Mr. Wyndham has invented the chief features of the land bill or created the conjunction of circumstances which has rendered its successful introduction politically possible. But where another man might have failed to seize the opportunity, he has risen to the occasion with infinite tact, and has beyond a doubt won his great battle in advance.

*Outlines of
the Measure.*

Our readers were early apprised of the fact that such a measure was forthcoming, in Mr. Walter Wellman's remarkable article published in our number for February, after his return from a study of the Irish situation on the ground. What Mr. Wellman outlined and predicted with an optimism that caused the wiseacres to shake their heads, is exactly what has come to pass. Mr. Wyndham's bill provides for the raising of money to buy out the Irish landlords through the gradual issue and sale of a new series of government stocks (bonds, as we should say), bearing $2\frac{1}{4}$ per cent. interest, and aggregating in the end about five hundred million dollars. It is proposed that the tenant farmers who are to become landowners shall, in lieu of paying rent, simply pay the government $3\frac{1}{4}$ per cent. per annum, as a fixed charge against the land, for a period of about sixty-eight years, when all obligations of principal and interest will have been discharged and the land will belong to the farmers free of all incumbrance. Meanwhile, the $3\frac{1}{4}$ per cent. will amount to decidedly less than the tenants are now paying to the landlords as rent. In order to make the landlords the more willing to sell, Mr. Wyndham's bill proposes an additional cash bonus ranging from 5 to 15 per cent. to be paid to the landlords in addition to the price of the land. This bonus will also be met by the sale of bonds, the interest of which will be paid out of the British Treasury; but Mr. Wyndham was able to show in his speech that it would be possible at once to cut down the present cost of the Land Courts and the Constabulary of Ireland enough to more than offset to the treasury the expense of this bonus to the landlords. In our opinion, the British Government will in the end find the land scheme advantageous rather than burdensome, even in the strict pecuniary sense.

*Its Success
Assured.*

In indirect ways it is obvious that to tranquilize Ireland by forever settling the land question would be of almost incalculable benefit to Great Britain. Mr. Wyndham's speech on the first reading of his land bill (March 25) was one of the greatest occasions in recent parliamentary history. The convention of the delegates of the Irish Nationalists and landowners at Dublin on April 16 was deemed by its participants as the most solemn and momentous occasion in the recent history of Ireland. It was agreed by an overwhelming majority to accept the Wyndham bill in principle, while asking for certain amendments for the better promotion of the interest of the tenants as against the landlords. The action of this



THE HON. GEORGE WYNDHAM.

Dublin convention made it practically certain that upon the second reading in Parliament, on April 22, the bill would proceed to its final passage after the necessary process of elaborate debate, article by article, with the adoption of various amendments in matters of detail. Mr. Gladstone's home rule bill, which passed the Liberal House of Commons, failed in the Tory House of Lords. Fortunately for the cause of Ireland, the present bill is a Tory measure, and its passage by the Commons will make certain its easy and prompt acceptance by the Lords.

*Will
Home Rule
Follow?*

Doubtless, many difficulties of a practical sort will arise in the carrying out of this vast project. Greatest of all, perhaps, will be the difficulty due to the proposed gradual operation of the purchase scheme. The position of those tenant farmers whose situation is dealt with in the first years will be so

much more favorable than that of their neighbors who continue to pay rent that there is sure to result a clamor for a very much more rapid transformation than Mr. Wyndham's bill now proposes. Most thoughtful men are of opinion that there will soon follow an important measure of home rule for Ireland, supported by Tories who until this year would never have thought it possible that they could change their minds so completely on that subject. At present, it is costing the English Government a pretty large sum of money to govern Ireland very badly. It will soon appear that the Irish may well be allowed to govern themselves at their own expense, on a plan which need not in the least interfere with the essential unity of the United Kingdom of Great Britain and Ireland.

*A New Century
of Hope for
Ireland.*

Since, apropos of the Louisiana Purchase, we have made frequent reference to the events of the year 1803, it is worth while to remind our readers that this Irish land-purchase bill, which the other day led William O'Brien for the first time in his life to say "God save the King," and which led the harsh Tory landlord, the Marquis of Clanricarde, for the first time in his life to say "God save

Ireland," promises to begin a new century of good feeling after exactly a hundred years of bitterness and hate following the execution of Robert Emmet in 1803. The economic and political future of Ireland may well be a happy one. Those projects of intelligent coöperation led by Mr. Plunkett and his associates, and described by him in our April number under the heading "Hope for the Irish Farmer," may well grow apace under the better conditions of peasant proprietorship. Two eminent Irishmen, Lord Iveagh, of Dublin, and Mr. Pirrie, of the great Belfast shipbuilding firm of Harlan & Wolff, in avowed recognition of the new era of Irish good feeling and bright outlook, have offered to furnish the capital for an extensive network either of light railways or motor trucks for the marketing of the produce of Irish farmers. It is often the extremes of dire necessity that prompt the efforts which lead to the most striking triumphs. Thus, fifteen or twenty years hence, we may be going to Ireland to learn some of the secrets of rural prosperity and content.

*Progress in Our
Own South.*

On just this principle, one may expect to go to the South, a few years hence, to learn a good many things about the best type of country school, and the best systems of manual and industrial training. Already the schools for negroes at Hampton and Tuskegee are teaching the world some new and valuable lessons in the way to develop intelligence and character through instruction in the doing of practical things. The problem of rebuilding country schoolhouses throughout the South and supplying well-trained teachers for them is so large and so serious as almost to be appalling. The one thing that makes an otherwise dark picture bright with hope is the splendid determination of the educational leaders of the South, and the evidence of the practical headway they are making in their work. That this forward trend was about to be made more apparent than ever before, was evident in the plans and programmes of the Conference for Education in the South to be held at Richmond this year from the 22d to the 24th of April. Mr. Cloyd's article in our April number on "The Old and the New in Southern Education" gave some striking concrete illustrations of the progress that is being made, this article being based on typical instances in the State of Georgia.

*North Carolina's
Attitude
as Typical.*

As showing what stand another progressive State is taking, we cannot do better than to quote from a private letter received from a trusted correspondent in North Carolina :



HIS CHEF-D'OEUVRE.

(For the Westminster Royal Academy.)

MR. GEORGE WYNDHAM: "'The contented Irishman'! It's a good subject—best thing I've done. If this isn't accepted, well, I don't know what they do want!"

From *Punch* (London).

You will be interested to know that every educational step taken by our Legislature, recently adjourned, was in the right direction. Appropriations for public schools and for the higher institutions of learning, for the establishment of libraries, and for the building of better schoolhouses are more liberal than they were two years ago or than they ever were. An historical commission to collect interesting material relating to North Carolina was established, with a small annual appropriation. A permanent loan fund of \$200,000 was established to aid school districts to borrow money at 4 per cent., to be returned in ten equal annual installments. This makes it certain that every year for all time the State board of education will have at least \$28,000 to lend to some districts that could not otherwise secure comfortable school buildings. This, you see, would erect annually, after the first expenditure, fifty-six five-hundred-dollar schoolhouses, or twenty-eight one-thousand-dollar schoolhouses.

We secured the passage of a bill increasing the State superintendent's salary 33½ per cent. and giving him as an extra clerk one of the best school men in the State, Mr. E. C. Brooks, who was secretary of our educational campaign committee last summer, and also increasing the salary of his stenographer.

The Legislature increased the appropriation to the State Normal and Industrial College from \$25,000 regular and \$15,000 special (for this year and next year) to \$43,000 regular annual, and the school has received, in addition, \$7,000 special appropriation for some dormitory repairs and a cold-storage plant.

It is a very significant fact that while the total State appropriations for the next two years are \$200,000 less than the appropriations were two years ago, yet all educational appropriations were increased.

Another significant fact is that while four bills were introduced in the House and Senate looking to the division of the public-school funds between the races according to the proportion paid in taxes by either race, not one of the bills was discussed on the floor of either house. One of them came up in the Senate, and some Senator moved to table it, which was done. Upon suggestion, however, that that ought not to be done, the bill was taken from the table, and when the "aye and no" vote was called, not a quorum voted, and only one man voted "aye." In the House, the experience was a little different, but the effect was the same. The author of one of the bills complained that every time he asked to bring up this bill something else was in the way, and he asked that the bill be made a special order for some future time. Immediately a bright young fellow moved to make it a special order for Saturday, March 14. This motion was seconded and carried amid the laughter of the House, because every one knew that the Legislature would adjourn, as it did, about March 9.

I give you these instances with some detail to show you how thoroughly right the general spirit of education is in North Carolina. Five or ten years ago, we would have wasted a good deal of time in discussing the negro question in connection with these educational matters. Our suffrage amendment has done more than anything else to give us a fair field for an educational fight.

It may be best not to discuss these matters publicly; but I am anxious that those who are most interested in our educational condition should know the facts. The friends of education have won so complete a victory that it would be cruel to crow over it, and unwise.

Moreover, the battle we have won is only a small part of the great work that must be done.

This terse letter is worth a dozen pages of mere comment upon conditions in the South. It breathes the healthy optimism of men who are working out their own problems. It anticipated the hopeful reports of progress that were to be brought up to the Richmond conference from all parts of the South.

Illiteracy and Child Labor. Closely akin to the problem of providing for the education of the children is the problem of child labor.

To meet effectively the evil of illiteracy in this country, we must deal with it in the period between the ages of ten and fifteen years. Not very much can be done for adult illiteracy; the flood must be checked nearer its source. A study of the facts makes it clear that illiteracy is considerably promoted by the employment of children in factories and otherwise. The past winter has seen much wholesome agitation of that question. We have twenty States in which 99 per cent. or more of the children between the ages of ten and fourteen are able to read and write. In such States, obviously, adult illiteracy will soon disappear except as it is recruited from foreign countries. But at the last census there were almost six hundred thousand illiterate children (between ten and fourteen) in the United States, five-sixths of whom were in a dozen States of the South. Happily, this Southern condition is greatly improved since 1890. Thus, North Carolina's illiterate children, who were more than 30 per cent. of the whole in 1890, were less than 22 per cent. of the whole in 1900. Louisiana's childhood illiteracy had decreased from 43 per cent. to 33 per cent.; South Carolina's from 39 to about 29 per cent.; Georgia's from 33 to 23 per cent.; and so in every Southern State there has been a marked gain in the intelligence of the children of both races. But this gain only serves to lend greater zeal to the efforts of those who are working in the movement. The growth of cotton mills and factories in the South has led to the employment of great numbers of children of an age much too young for such work.

The New Laws to Protect Children. In Alabama, which has the largest number of illiterate children of any State in the Union, an employment bill has now been passed which leaves much to be desired but is better than nothing. It keeps children under ten out of the factories, and those under twelve, except in cases where a widowed mother or disabled father needs the child's support. It keeps children under thirteen out of night work in factories, and forbids

the working of children under twelve for more than eleven hours a day. This Alabama bill was a rather sorry compromise that does not do credit to the capitalists who own the cotton mills of that State. South Carolina has a new law which keeps children under ten out of the factories this year, raises the age to eleven for next year, and to twelve for the year following. It seems about on a par with the Alabama law, and falls a long way short of those enforced in the Northern States and in England. The bills in the New York Legislature have related to particular classes of child labor, such as newsboys, bootblacks, and others in the large towns, and to better enforcement of older acts. The Pennsylvania movement seems to have resulted from the evidence touching child labor brought out in the hearings before the Coal Strike Commission, and also from certain serious evils in manufacturing establishments of the Pittsburg district. Oregon has a new law that forbids the employment of children under fourteen in stores, mills, and mines, and under sixteen unless they can read and write. Virginia and Arkansas are among the Southern States that have this year enacted new laws on the subject of child labor, and the New Jersey Legislature has something to its credit in the same line.

Another excellent movement on behalf of a wiser and better dealing with childhood is that for the establishment of juvenile courts for young offenders. The Indiana Legislature of this year has enacted a good law of this kind for Indianapolis and other parts of the State. Chicago's juvenile court is already far-famed for the effective way in which it deals with the thousands of cases that come before it, and the juvenile court in New

York City, established a year ago, seems to have fully justified expectations. The case of Missouri must not be overlooked, for it has adopted a new law of this kind which is highly praised by the newspapers of St. Louis and Kansas City. The laws providing for these juvenile courts give the judges great discretionary authority, and the object of them is partly to protect society, but especially to secure the reformation of young misdemeanants. The adoption of laws of this kind in the neighboring States of Indiana and Missouri is in large part a personal tribute to the effectiveness of the Illinois law as carried out by Judge Tuthill, of Chicago. The desire of Judge Tuthill to be able to commit offending boys to the wholesome influences of a farm school, with shops and industrial features, is to be realized on a large and important scale, funds having been secured and a location fixed for the development of such an institution.

Municipal Tendencies.

The municipal elections of last month demonstrated in a general way the steadily diminishing influence of political parties in local affairs. Our great towns have problems of their own which to their citizens are far more vital and important than any issues that divide the Republican and Democratic parties. In the Ohio cities, the most striking result was the election for a fourth term of Mayor Jones, of Toledo, who was without the support of either party or of any newspaper. A lesson may be learned from the ease with which Mayor Jones defeated the Republican and Democratic candidates and triumphed over newspaper detraction. The lesson is that in local matters, where the people can judge for themselves, newspapers are only influential when they are fair-minded, sincere, and print the news as it



Mayor Jones, Toledo.

Mayor Johnson, Cleveland.

Mayor Fleischmann, Cincinnati.

THREE OHIO MAYORS REELECTED LAST MONTH.

is. The Hon. Tom L. Johnson, mayor of Cleveland, was accorded another term, not merely because he is an interesting political personality, but because the working people of Cleveland were disposed to favor his programme for immediate three-cent street-railroad fares and ultimate municipal ownership. Mr. Johnson's hand has been strengthened by the election of a Democratic Council that will support him. In Chicago, while the Republican candidate's platform on the street-railroad question was as popular as that upon which Mayor Harrison stood, it was asserted that the street-railroad interests themselves were supporting the Republican candidate; and this may have helped to give Carter Harrison his decisive victory. The most notable reform tendency in Chicago has been in the direction of improving the quality of the Board of Aldermen through the work of the Municipal Voters' League. Most of the new aldermen elected last month were men who had received the league's indorsement. The Cincinnati election resulted in the victory of Mayor Fleischmann, the Republican candidate, as against Mr. M. E. Ingalls, the distinguished candidate of the Democrats and Independents. Cincinnati lags behind our other large towns in its appreciation of the value of independence in local affairs.

*Fighting the
"Grabbers"
and
"Boodlers."*

In St. Louis, also, the so-called machine elements were victorious as against the candidates of the men responsible for the recent exposure of corruption; but the election was not for a mayor or a full ticket. Philadelphia, last month, was confronted with a scheme on the part of certain private interests to get possession of the municipal waterworks, in imitation of the successful grab of the city's municipal lighting plant a few years ago. The new mayor of Philadelphia, John Weaver, seems disposed to stand firmly against boodling and corruption in what has for some time been regarded as the worst-governed of our large municipalities. The Citizens' Union of New York, in a fine convention last month, passed resolutions which embody a magnificent tribute to the effectiveness and value of the work of Mayor Low's administration. There has of late been a steady increase in the prestige of the New York city government as at present administered, and the chances seem to be good for Mayor Low's renomination. There has been a strong impression that the Legislature at Albany, which finished its work and adjourned last month, has this year been more than usually susceptible to malign influences as exercised principally by street-railroad corporations and similar agencies. The fight of the municipal



From stereoscopic photo by Underwood & Underwood, N. Y.

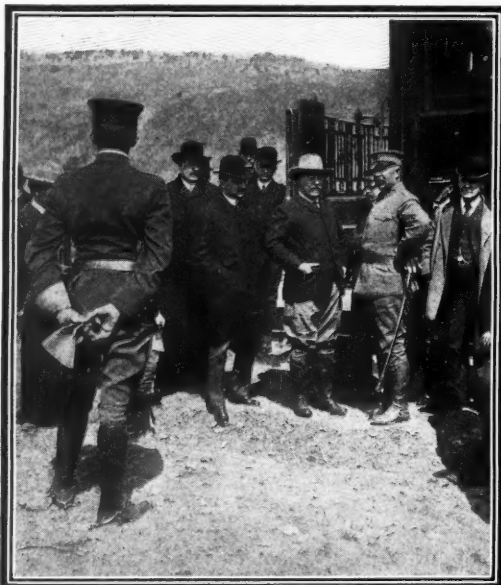
THE PRESIDENT MAKING A WESTERN SPEECH.

authorities of New York City against the so-called "grab" bills at Albany was well supported by the newspapers, and by the commercial and reform organizations of the city; and their vigilance was successful.

*The
Presidential
Tour.*

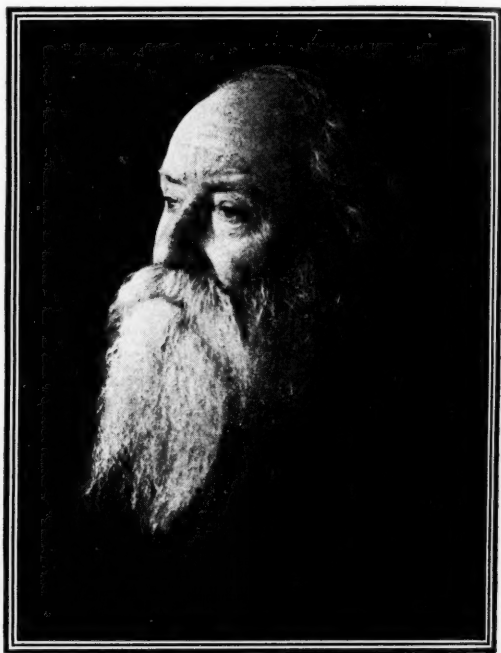
President Roosevelt's Western trip had been carried out according to programme, when these pages were closed for the press. He had left Washington on the first day of April *en route* for the Yellowstone Park, and it was his plan to leave the park on April 24, in order to proceed to St. Louis, to arrive on April 25, and to be present on April 30 at the dedicatory ceremonies of the Louisiana Purchase Exposition. Such was the rounded programme for the month of April. The programme for the present month of May consists simply of a visit to California, Oregon, and Washington, with many stops on the way out there, and some stops on the return journey to Washington, which is to end on June 6. So much for the general itinerary. On his way to the Yellowstone Park, Mr. Roosevelt's first important stop was at Chicago, where he received the degree of LL.D. at the University of Chicago, laid the corner-stone of the new law-school building, and made an important evening address at the Auditorium on the Monroe Doctrine. This was on April 2. The journey was broken at Milwaukee on April 3, where the President gave a well-prepared address on trusts, chiefly in review of the situation as it now stands. On April 4, the President visited St. Paul and Minneapolis, and at the latter city, on the evening of that day, he spoke on the tariff question,

defending the protective principle, and expounding the view that tariff reform is not to be regarded as a prime remedy for the evils of trusts and monopolies. Sunday was spent at Sioux Falls, S. D., and Monday, the 8th, found the President at Gardiner, Mont., at the entrance of the Yellowstone Park. He had invited the distinguished naturalist and author, John Burroughs, to join him as his companion on his sixteen days' sojourn in that reservation of forests, mountains, and natural wonders; and it was carefully arranged that this vacation should be free from public intrusion. It was not a hunting trip, but an outing for rest and recreation,—the most complete and satisfactory one, probably, that the President has had in a long time. The route from the Yellowstone Park to St. Louis was across Nebraska to Omaha, thence across Iowa to the Mississippi River at Keokuk, and southward to the exposition city. Great enthusiasm for the President was manifest everywhere throughout a journey which seemed to be entirely free from all unpleasant incidents. Democrats and Populists vied with Republicans to greet the visitor,—because he was President of the United States, but also because he was Theodore Roosevelt. This month's touring includes stops at Kansas City, Topeka, Sharon Springs (for Sunday, May 3), Denver and other Colorado towns for the following day, New Mexican towns for May 5, the Grand Cañon of the Colorado for May 6,



From stereoscopic photo by Underwood & Underwood, N. Y.

THE PRESIDENT LEAVING TRAIN TO ENTER YELLOWSTONE PARK, ON APRIL 8.



JOHN BURROUGHS.

(Who accompanied the President in the Yellowstone Park.)

Southern California towns from May 7 to 11, the Leland Stanford University on the morning of May 12, San Francisco and vicinity for the next three days, to be followed by a three days' visit to the Yosemite Valley and the big-tree region. Then comes the journey northward to Oregon, with May 21 devoted to Portland, and the next four or five days to the towns and cities of Washington and the Puget Sound region. The return journey is by way of Montana and Idaho to Salt Lake City May 29, and Wyoming towns May 30, with Sunday, May 31, at Cheyenne, and the next Sunday at the White House.

King Edward has been absent from *King Edward's Travels.* England on a sailing and visiting tour throughout the month of April, and

he is prolonging his visit into the month of May. He went first to Portugal, with which country England has long professed to maintain relations of intimacy akin to alliance. His trip included some touring in the Mediterranean and a visit to English outposts, such as Gibraltar and Malta. A warm welcome was awaiting him in Rome, where he was to visit late in April, while the French were interested in his plans for visiting Paris in May. King Edward has always been personally very popular with the

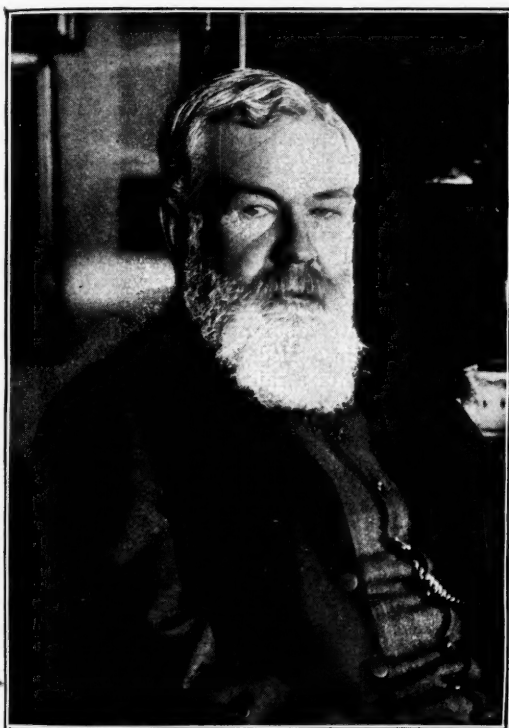


Photo by Russell & Sons.

THE LATE MR. W. S. CAINE, M.P.

French. The Queen has been visiting in Denmark, and she is to accompany the King on an Irish trip early in the summer. The Irish Nationalists have made it known that the King may count upon a cordial reception.

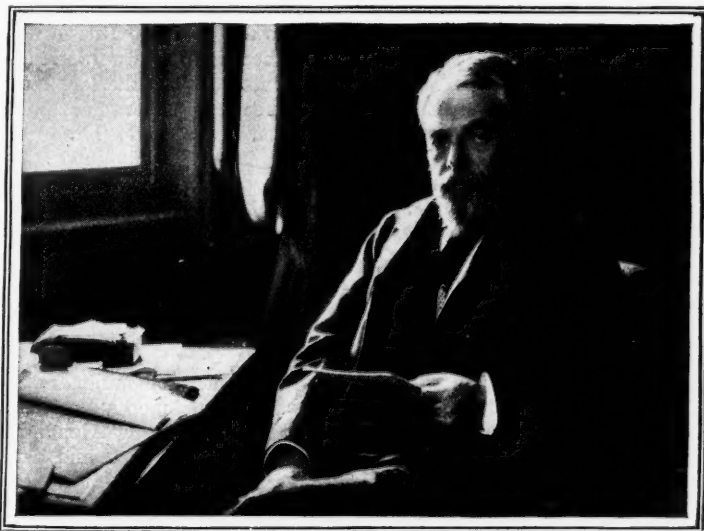
British Politics.

The growing dissatisfaction with the Balfour administration, which was expressing itself in marked Liberal gains in by-elections, seems less evident since the Irish land-purchase bill has been so successfully brought forward, and since Mr. Chamberlain's triumphant return has so much enhanced his prestige and reassured the country about imperial affairs in South Africa. The drift of party reorganization seems to be in the direction of a union between the Labor

party, with its radical and socialistic tendencies, and the Liberals. The most notable victory of this combination was the recent election of Mr. William Crooks as a member of Parliament for Woolwich, where he converted a large Tory majority into a still larger one for the coalition that has now come to be dubbed "Lib-Lab." For old-fashioned Whiggish Liberalism in England, there is no future. The radical wing of the Liberal party has come into close touch with the more conservative wing of the Labor party, and in this combination lies the only clear prospect of an organization that may hope to defeat the Tories. One of the staunchest leaders of advanced Liberalism, well known and greatly esteemed also in the United States, was the Hon. W. S. Caine, the news of whose death was received in this country with great regret a few weeks ago. His vacant seat in Parliament has already been filled, and the constituency has gone Liberal by a strong majority.

London Measures.

When the education bill, of which so much was said a few months ago, was enacted, the metropolis of London was omitted from its operations. The effect of that bill was to weaken the public-school boards and to throw the control of elementary education more strongly into the hands of ecclesiastical bodies. The secular system of free public schools has been much more strongly intrenched in London than in the country at large. The government has now brought in an education bill for London, however, that meets with much



LORD MONKSWELL, NEW CHAIRMAN OF LONDON COUNTY COUNCIL.

criticism, the Liberals especially opposing it strenuously. It abolishes the present school board, and makes the London County Council the supreme authority in both elementary and secondary education. The Tory predominance at Westminster is not particularly favorable to the progressive development of the great city of London. The government is, however, pushing the measure to improve the port and the shipping facilities, although the movement for a proper public water-supply seems to lag rather hopelessly. New York seems to be gaining on London.

A New Naval Station.

The government is excusing the growth of naval expenditures on the ground of Germany's energetic programmes, and it is avowedly due to the increasing strength of Germany that a new naval base of importance is about to be developed in the Orkney Islands, guarding the upper end of the British Isles, and commanding the northern entrance to the North Sea, as the Channel fleet commands the southern entrance. Another obvious reason for the new base is that the English navy is getting so large that new provision of some kind has to be made for necessary dockage and port facilities.

French Affairs.

The head of the French Republic, as well as President Roosevelt and King Edward, has been off on an interesting tour. In the middle of April, he went to visit Algeria, this being a trip that no other president of the Third Republic has undertaken. The French interest in North Africa is steadily increasing. The ministry has had remarkably strong support from the legislative chambers in its drastic enforcement of the law against religious orders. The most notable instance occurred toward the end of March, when the application of the Carthusian monks, the wealthiest of all the orders in France, was refused by the Chamber of Deputies by a vote of 338 to 231. The monks and nuns are leaving France in great numbers and going to neighboring countries. Only four or five out of fifty-four religious orders of men have had their applications granted by the parliamentary committee.

Germany, Denmark, Holland.

The German Emperor's foreign visit, —for he, too, has been away from home,—was a quiet but by no means insignificant trip to Denmark early in April. His purpose was said to be to secure Denmark's adherence to the Triple Alliance. It is believed that Germany hopes to bring Denmark into

close relations with the empire, perhaps to the extent of securing a commercial union. King Christian, by the way, was eighty-five years old on April 8. Very much was said also last month about Germany's desire for close relations with Holland. This talk was stimulated by the fact that the formidable railway strikes in Holland threatened for a time to obstruct German trade very inconveniently. It was on the morning of April 6 that a general strike was ordered of all labor throughout Holland engaged in transportation. This was organized labor's answer to Premier Kuyper's pending bills to regulate labor and penalize strikes on the government-owned railroads. One of the bills provided for a railroad military brigade to be used in case of necessity, and another provided for punishment, by imprisonment and fine, of any acts of the kind customary in labor contests. The widespread strike did not prevent the parliamentary chambers from passing the bills almost unanimously. And the strike completely collapsed after a few days.

In Southeastern Europe.

In the southeast of Europe, the situation remains critical. There have been very serious outbreaks in Macedonia, and many outrages and much loss of life. In connection with a local conflict in the heart of Macedonia, an Albanian soldier killed the Russian consul, M. Stcherbina. This was at the end of March. The Turkish soldiery has been ruthless in its dealings with local insurrections, although the Sultan has professed to prefer lenient methods and is apparently acting in good faith in trying to carry out the reforms that Russia and Austria joined in prescribing. There was much comment in the European press on the fact that the Czar, while agreeing not to intervene on behalf of the Macedonians, had made King Alexander of Servia a present of 10,000,000 cartridges. Alexander, by the way, has distinguished himself by suspending the constitution of the country for a matter of five minutes or so, in which brief period he acted as an absolute ruler and performed a huge amount of business. He repealed liberal laws relating to the suffrage, and reenacted a former code which will tend to keep the radicals out of the legislative chamber. There was wholesale retirement of ministers, senators, and councilors. With men and measures rearranged to his satisfaction, King Alexander touched the parliamentary pendulum and set the wheels of constitutional government in motion again. European rivalry continues to occupy itself anxiously with Persian questions.



THE UNITED STATES GOVERNMENT BUILDING AT THE ST. LOUIS EXPOSITION.

RECORD OF CURRENT EVENTS.

(From March 21 to April 19, 1903.)

POLITICS AND GOVERNMENT—AMERICAN.

March 25.—The Texas Court of Appeals decides that the Galveston Municipal Commission is unconstitutional; this decision leaves the city without a constituted government.

March 26.—President Roosevelt issues an order extending to such large cities as may be agreed upon the registration system for laborers.... The United States Treasury Department resumes refunding operations.... The New York Legislature passes the bill for the \$100,000,000 canal improvement.

March 28.—Attorney-General James S. Harlan, of Porto Rico, resigns office.

March 31.—The New York Legislature passes the bill for increasing liquor licenses 50 per cent.

April 1.—The Indiana Supreme Court declares unconstitutional the law providing a minimum wage in public work.

April 6.—Mayors Tom L. Johnson (Dem.), of Cleveland, Julius Fleischmann (Rep.), of Cincinnati, and Samuel M. Jones (Ind.), of Toledo, are reelected by large majorities.... Republicans carry Michigan for State officers by 35,000.

April 7.—Mayor Carter H. Harrison (Dem.), of Chicago, is reelected by a decreased plurality.... The town elections in Kansas show an overwhelming majority in favor of prohibition; the Republicans make gains throughout the State.

April 8.—The Indiana Supreme Court declares the weekly-payment law unconstitutional.

April 9.—The United States Circuit Court of Appeals, at St. Paul, decides that the Northern Securities Company is an illegal combination in restraint of trade, and

enjoins it from exercising any control over the Northern Pacific and Great Northern Railroad companies.

April 13.—Postmaster-General Payne states that he will make a thorough investigation of alleged scandals in the Post Office Department.

April 15.—A revision of the civil-service rules, by which the classified service is considerably extended, goes into effect.

POLITICS AND GOVERNMENT—FOREIGN.

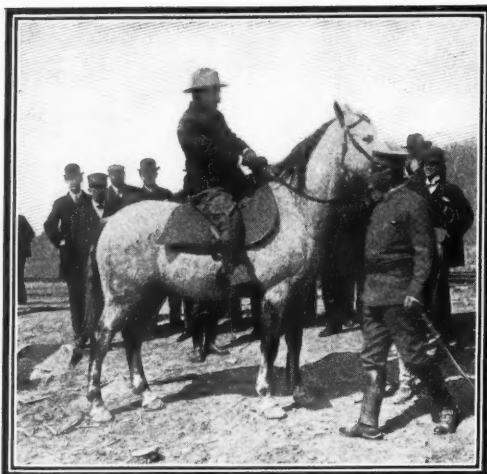
March 21.—President Castro, of Venezuela, resigns office.... In the French Senate, the government announces the intention of maintaining the Concordat if the clergy keep out of politics.... The prime minister of Colombia and two other members of the cabinet resign.... Peace is declared in Uruguay.

March 23.—Revolutions break out in San Domingo and in Managua, the capital of Nicaragua; a mob attacks the government buildings at Port of Spain, Trinidad, and is fired on by the police.

March 24.—The French Chamber of Deputies, by a vote of 304 to 246, refuses to authorize religious preaching orders.

March 25.—Mr. Wyndham, Chief Secretary for Ireland, introduces the Irish land bill in the British House of Commons; the measure involves a loan of not more than \$500,000,000 at 3½ per cent. interest, and a bonus of \$60,000,000.... President Castro, of Venezuela, withdraws his resignation.... Five thousand Republicans meet in Madrid, Spain, and choose Professor Salmeron leader of their party.

March 26.—The French Chamber of Deputies, by a vote of 338 to 231, refuses to permit the Carthusian monks to remain in France.



From a stereoscopic photo by Underwood & Underwood, New York.

PRESIDENT ROOSEVELT STARTING ON HIS RIDE INTO
YELLOWSTONE PARK.

March 27.—The Bulgarian cabinet resigns.

March 30.—The Greek minister of war resigns.

April 1.—Mr. Wyndham announces in the British House of Commons a new bill appropriating \$975,000 annually to Ireland.... A select committee of the British House of Commons is appointed to inquire into "municipal trading" in Great Britain.

April 6.—The Cuban Congress reassembles.

April 7.—King Alexander of Serbia suspends the constitution to make changes in the laws of the country.

April 9.—The Netherlands Parliament passes an anti-strike bill by a large majority.

April 16.—The Irish Nationalist convention at Dublin approves the land bill in principle.

INTERNATIONAL RELATIONS.

March 21.—The *modus vivendi* proposed by Brazil to Bolivia in connection with the question as to the ownership of the Acre territory is signed by representatives of the two governments.

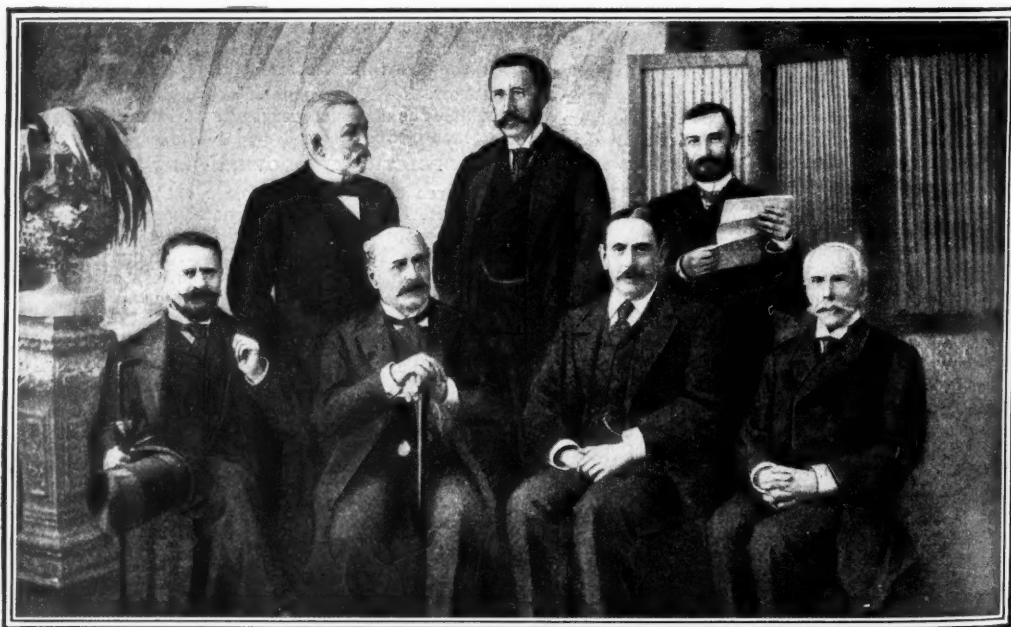
March 23.—The upper house of the Newfoundland Legislature passes the bill renewing the Treaty Shore *modus vivendi* for another year.

March 25.—The Navy Department decides to abandon its plan for a cruise of the battleship squadron to Europe this summer, and the United States therefore declines the invitation of Emperor William to have the squadron visit Kiel.

March 28.—The Cuban Senate adopts the reciprocity treaty as amended by the United States Senate.

March 29.—It is announced that the first meeting of the Alaskan Boundary Commission has been deferred until next fall.... Admiral Dewey makes an explanation regarding his criticisms of the German Emperor and navy that has aroused hostile comment in Germany.

March 31.—Ratifications of the reciprocity treaty between the United States and Cuba are exchanged at Washington.



M. Constans (France). Sir Nicholas O'Connor (England).
Commander Pansa (Italy). Baron Calice (Austria). Baron von Bieberstein (Germany). M. Zinoviev (Russia).

AMBASSADORS OF THE EUROPEAN POWERS AT CONSTANTINOPLE.



King Christian IX. (born in 1818). Prince Christian (born in 1870) and his son, Prince Frederick (born in 1899). Prince Frederick, the heir apparent (born in 1843).

FOUR GENERATIONS OF THE ROYAL HOUSE OF DENMARK.
(The King's eighty-fifth birthday was celebrated on April 8.)

April 3.—The Venezuelan negotiations are resumed at Washington; a proposal that Venezuela pay the cost of the blockade is rejected.

April 6.—It is announced that Judge Jacob M. Dickinson, of Chicago, David T. Watson, of Pittsburg, and Hannis Taylor, ex-United States minister to Spain, have been selected as counsel for the United States before the Alaskan Boundary Commission.

OTHER OCCURRENCES OF THE MONTH.

March 21.—Director Stübke, of the German Colonial Office, informs the Reichstag that household slavery has been abolished in German West Africa.... A diversion of the water by an ice-jamb at Niagara leaves the American channel nearly dry.

March 22.—The Ladrones capture the town of Surigao, province of Mindanao, P. I., killing a constabulary inspector and others.

March 24.—Earthquake shocks are felt in midland counties of England.... The town of Surigao, province of Mindanao, P. I., is relieved by constabulary.... The Canadian government and the Allan Steamship Line sign an agreement for a new fast line of steamers between Canada and Glasgow and Liverpool.... The incorporation of the National Packing Company, with a capital stock of \$15,000,000, is announced in Chicago.... Pennsylvania stockholders approve the increase of the

capital stock of the company to \$400,000,000.... Judge Kohlsaat, in the United States District Court at Chicago, issues an injunction against the coal trust operating in that city.

March 27.—In an attack by Macabebe scouts on a force of Filipino insurgents, in Rizal Province, P. I., forty-five of the latter are killed.

March 28.—The statue of William E. Gladstone is placed in Westminster Abbey.... Cambridge defeats Oxford in the annual track athletic games.... Twenty thousand operatives of the cotton mills at Lowell, Mass., are thrown out of work by a strike for higher wages.... Great damage is reported from the Mississippi floods.

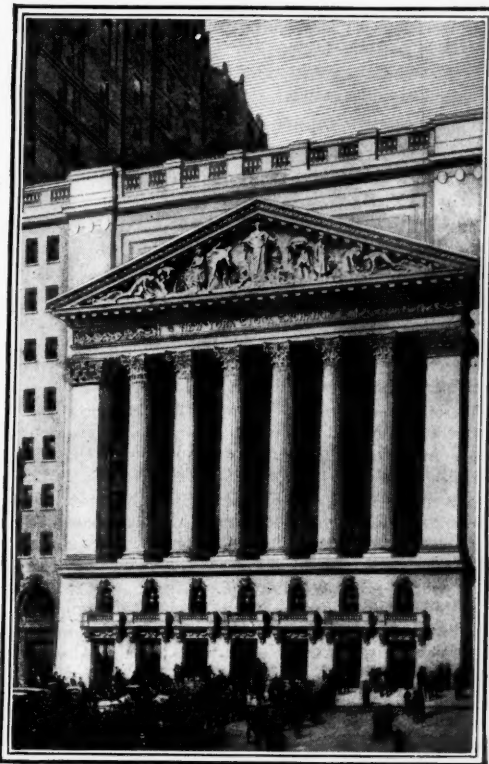
March 31.—Sir Thomas Lipton's new challenger for the America's cup, *Shamrock III.*, has a trial on the Clyde, and easily defeats *Shamrock I.*

April 1.—President Roosevelt leaves Washington on his Western trip.... The award of the Coal Strike Commission goes into effect in the anthracite region of Pennsylvania.... Cambridge defeats Oxford by six lengths and 19 minutes, 32½ seconds in the annual university boat race on the Thames.

April 2.—President Roosevelt speaks in Chicago on the Monroe Doctrine and receives the degree of LL.D. from the University of Chicago.

April 3.—President Roosevelt speaks on the trust question at Milwaukee, and addresses the Wisconsin Legislature, in session at Madison.

April 4.—President Roosevelt speaks at Minneapolis



THE NEW HOME OF THE NEW YORK STOCK EXCHANGE.

on the tariff question, and addresses the Minnesota Legislature in session at St. Paul.

April 6.—A general strike is ordered on the transportation system of Holland, both land and water, because of certain proposed labor legislation.

April 8.—It is announced that Andrew Carnegie has offered the city of Cleveland \$250,000 for the establishment of seven branch libraries, provided the city gives the sites and an annual appropriation of \$25,000 a year. . . . The transportation strike in Holland is broken, most of the railway men returning to work. . . . President Roosevelt enters the Yellowstone Park. . . . King Christian of Denmark celebrates his eighty-fifth birthday (see page 597).

April 9.—An explosion on the battleship *Iowa* while at target practice in the Gulf of Mexico results in the death of three men and much damage to the vessel.

April 10.—Captain Pershing's force on the island of Mindanao, P. I., captures the fort at Bacalod, killing 100 Moros and wounding many others.

April 11.—The *Reliance*, the new defender of the America's cup, is launched at the Herreshoff yards, Bristol, R. I.

April 12.—The *Retna Christina*, Admiral Montojo's flagship, in Manila Bay, is raised and beached; the skeletons of eighty of the crew are found in the hull.

April 14.—Ex-President Grover Cleveland addresses a large meeting in New York City in the interest of industrial education in the South.

April 15.—The salon of the National Society of Fine Arts is opened in Paris. . . . President Loubet of France arrives in Algiers.

April 17.—Cold weather of unusual severity prevails in England and France.

OBITUARY.

March 22.—Dean Farrar, of Canterbury, 72. . . . Rt. Rev. James Rogers, D.D., Roman Catholic Bishop of Chatham, N. B., 77.

March 23.—Rev. George H. Ide, D.D., of Milwaukee, a well-known Congregational clergyman, 64.

March 25.—John Henry Weissenbruch, the Dutch landscape painter, 80.

March 26.—Samuel D. Hastings, of Wisconsin, prominent in reform movements for half a century, 86.

March 27.—Nathaniel K. Fairbank, a wealthy manufacturer of Chicago, 74.

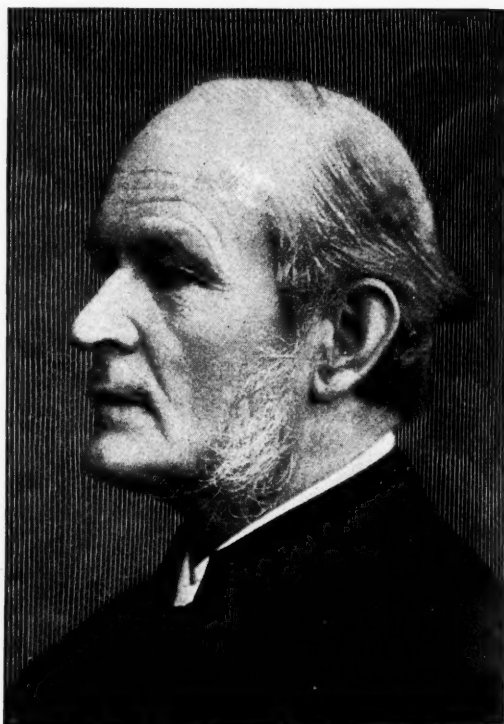
March 28.—Baron Whetttnall, Belgian minister to Great Britain, 63. . . . Edward Rudolph Johnes, counsel for Venezuela in her boundary dispute with Great Britain, 51.

March 29.—Gustavus Franklin Swift, president of the Chicago packing company known by his name, 63. . . . William V. McKean, for nearly thirty years editor-in-chief of the Philadelphia *Public Ledger*, 83.

March 30.—Gen. William H. Jackson, of the famous "Belle Meade" Farm, near Nashville, Tenn., 68. . . . Frederick Boscovitz, the Hungarian pianist, 67. . . . Dr. Goronwey Owen, of Mobile, Ala., an authority on obstetrics, 69.

March 31.—Ex-Senator H. W. Corbett, of Oregon, 76. . . . Ebenezer Butterick, originator of the tissue-paper dress pattern, 73.

April 4.—John D. Washburn, of Massachusetts, minister to Switzerland under President Harrison, 70.



THE LATE DEAN FARRAR.

April 5.—Mrs. J. A. Sadlier, the well-known Irish Catholic author, 83.

April 6.—Prof. Henry Barker Hill, of Harvard University.

April 7.—Rear-Admiral George E. Belknap, U.S.N., retired, 71. . . . J. B. Atherton, an influential business man in the Hawaiian Islands, 66.

April 8.—Henry Van Brunt, a well-known architect, designer of the Electric Building at the Chicago World's Fair of 1893, 70.

April 9.—Hillary Bell, dramatic and music critic, of New York, 46.

April 10.—Rev. William Henry Milburn, the blind chaplain of the United States Senate, 80. . . . Yung-Lu, comptroller of finances of China.

April 11.—Apostle Brigham Young, of Salt Lake City. . . . Ex-Congressman John S. Jones, of Ohio.

April 12.—Col. John E. MacGowan, editor of the Chattanooga (Tenn.) *Times*, 72.

April 13.—Ex-Congressman Abner Taylor, of Chicago, 74. . . . Prof. Moritz Lazarus, of Berlin University, Germany, 79. . . . Rev. John Fenwick Kitto, a well-known biblical scholar, 66. . . . A. H. Gilmor, a member of the Canadian Senate, 80.

April 14.—Thomas Waterman Wood, the American artist, 80. . . . Hallett Kilbourn, a well-known citizen of Washington, D. C., 72.

April 15.—Rabbi Gustav Gottheil, of New York City, 76.



UNCLE SAM: "Keep on the course. No squalls in sight."—From the *Herald* (Boston).

VARIOUS CARTOON COMMENTS.

AS effective a cartoon as any we have seen in a long time is one by Mr. Rehse, of the *St. Paul Pioneer Press*, reproduced on this page. If business conditions had been inherently weak, the uncertainty created by the Northern Securities decision, last month, would have had serious results. But the one thing demonstrated was the solidity of the foundations upon which our present edifice of prosperity has been reared. Mr. J. Pierpont Morgan's phrase about "undigested securities" has described the Wall Street condition that ob-

viously exists; yet a dull stock market is compatible with a healthy condition of industry and trade.

The two cartoons on the next page very truthfully show (1) that the adverse Northern Securities decision, and such incidents as the fining of the meat-packing companies in Missouri, are checking the formation of new trusts and combines, and (2) that recent experience has taught the "trust magnates" and "captains of industry" to apply the principles of conciliation and arbitration to labor disputes.



A GOOD UMBRELLA
KEEPS OFF THE
WATER.

From the
Pioneer Press
(St. Paul).



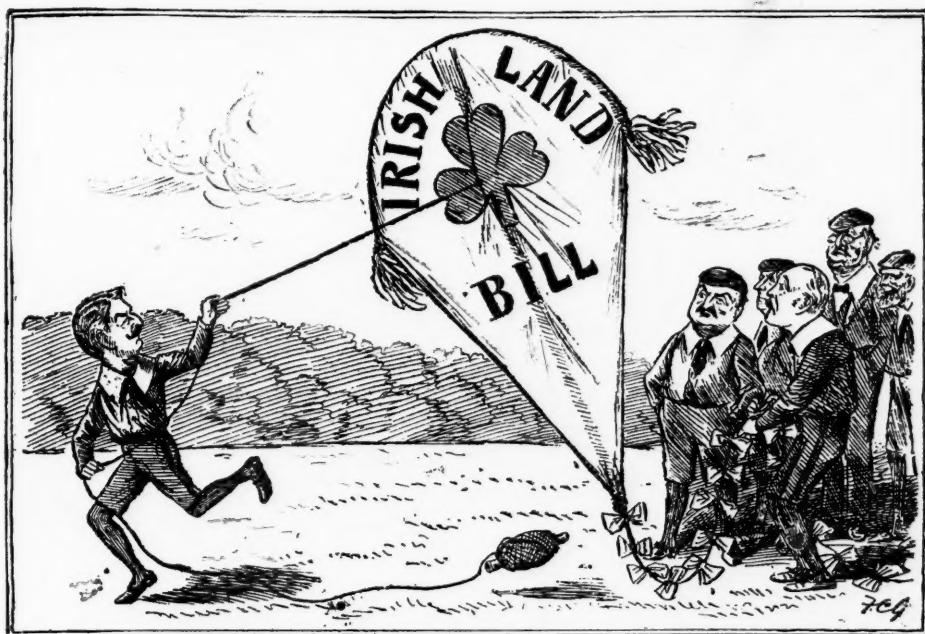
"OPEN YOUR MOUTH AND SHUT YOUR EYES."
From the *World* (New York).



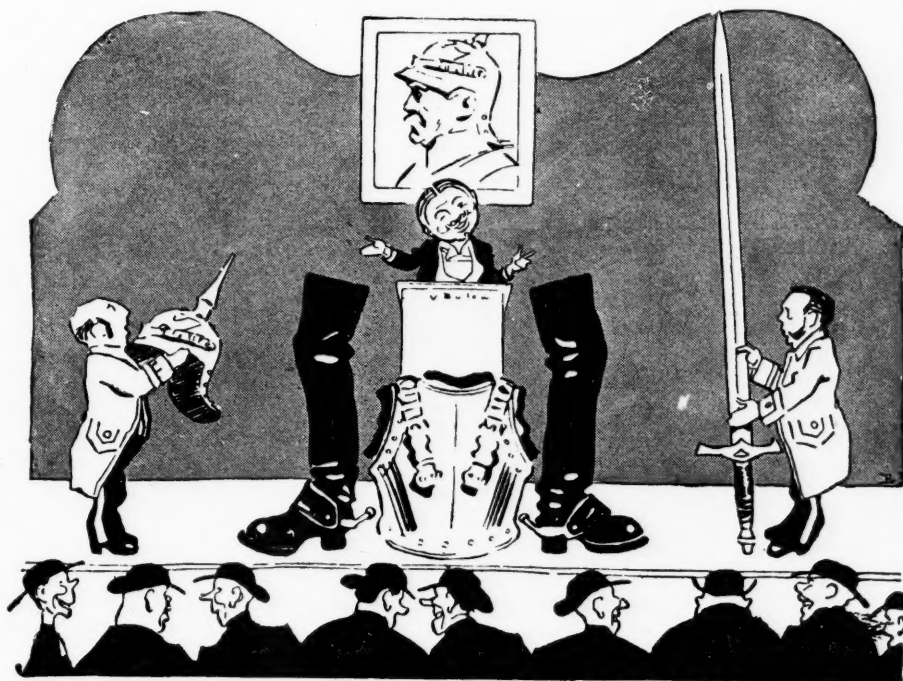
"SHOO, FLY, DON'T BOTHER ME!"—From the *Evening News* (Detroit).



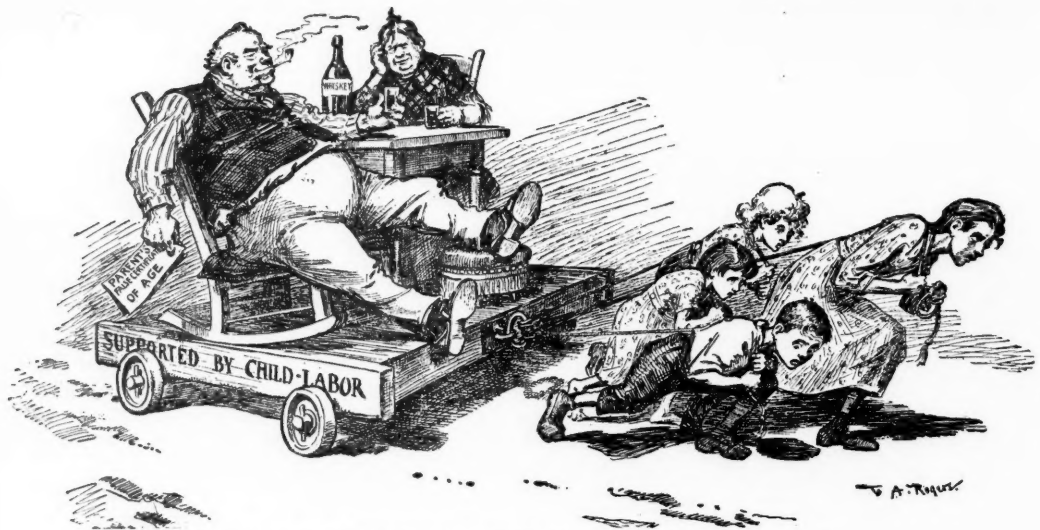
THE BURNT CAPITALIST DREADS THE FIRE.—From the *Herald* (New York).



STARTING THE BILL.—ARTHUR: "It's all right, George; I think it'll go."—From the *Westminster Gazette* (London).



VON BÜLOW (to the Clericals): "Do not enrage me. I would be loath to have to put on Bismarck's old armor."
From *Kladderadatsch* (Berlin).

ONE REASON FOR THE CHILD-LABOR PROBLEM.—From the *Herald* (New York).

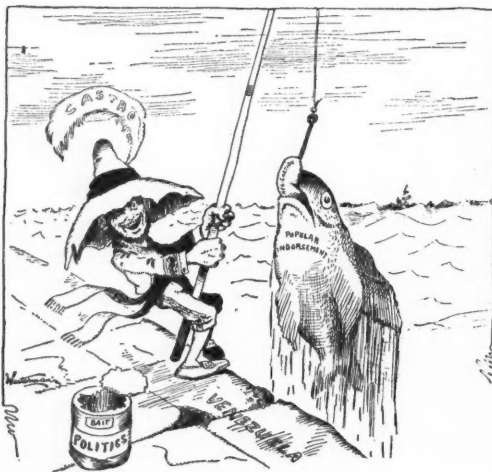
On page 531 of this number we have commented upon the recent passage, in various States, of new laws for the better protection of children from the evils of employment at a tender age in factories and mills, and in other laborious occupations. The cartoon at the top of this page is a painful one, but the facts in hundreds of instances justify it. There is ample evidence that many small children are wearing their lives out at hard work to support lazy and dissipated parents.

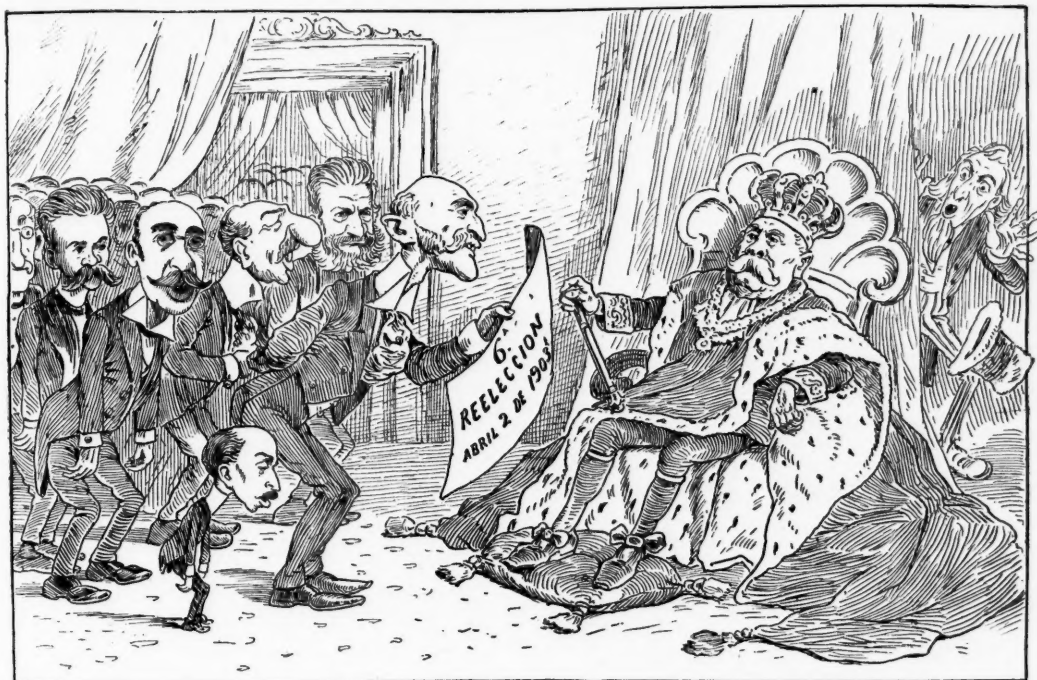
Several weeks ago, President Castro, of Venezuela, resigned in a dramatic fashion, only to reconsider, upon a vote of confidence. Hence the amusing cartoon below.

President Roosevelt would enjoy Bush's allusion,—also on this page. The President, in the Yellowstone Park, calls Mr. John Burroughs' attention to a sign

which tells the visitor that the geyser spouts every minute, and confesses himself beaten.

The one subject of agitation in Mexico is the question whether or not President Diaz is to run for a sixth term. This is the Mexican presidential year, the election occurring next November. The cartoon at the top of the opposite page shows representatives of a new Liberal Union party who waited on Diaz early last month to inform him of their purpose to keep him in office. The next picture represents Diaz conquering the convention of the radical party, which declares for his reelection. The third represents the neighboring republic of Guatemala, which has a boundary dispute with Mexico, and is said to have been pleading in vain for arbitration of the question.

HE GOT WHAT HE WAS FISHING FOR.
From the *Ohio State Journal* (Columbus)."THAT BEATS ME!"—From the *World* (New York).



See preceding page for explanation of these cartoons, all from *El Hijo del Ahutzote* (Mexico).



THE DAILY PRAYER.

AUSTRALIA: "Give us this day our daily bread."

GUNNER BARTON: "Not if we know it. Foreign flour must not be allowed in these ports! Ha! that shot went home. We'll sink her yet!"

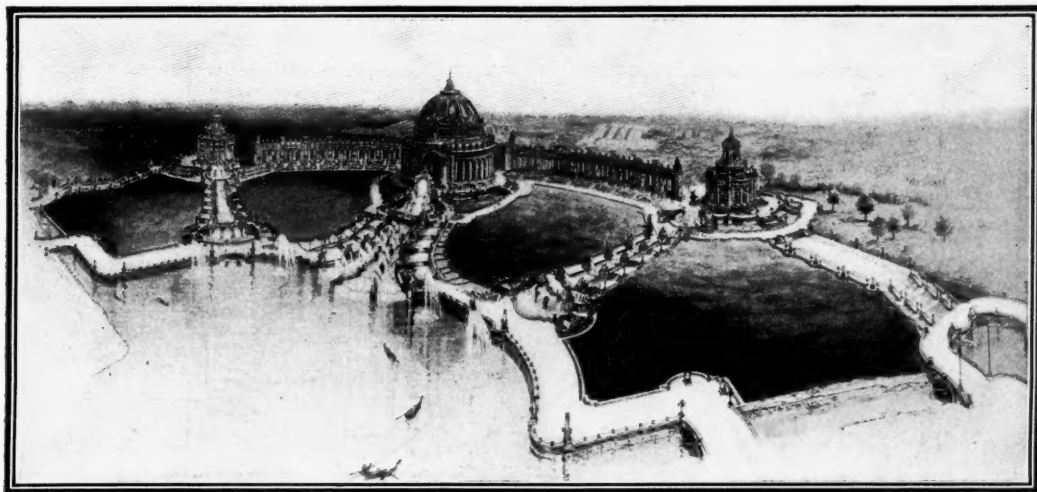
[The price of wheat in Australia is 6s. 3d. per bushel; the price in San Francisco is 3s. 10d. per bushel. San Francisco wheat could be landed in Melbourne at a cost of 4s. 6d. per bushel if there were no duty.]—From *Punch* (Melbourne).



GERMANY AND ENGLAND.

(The British Lion lay idly stretched out digesting his bloody feast of South Africa, when high in the air he saw the German Eagle, who in a jolly spirit of carnival was flying in zigzag lines hither and thither. The Lion, filled with jealousy to see the Eagle so gay, spat at him angrily. The shot fell back and hit the Lion in the eye. "It is unheard of the way in which this common bird pelts me with dirt," said the Lion then.)—From *Simplicissimus* (Berlin).

AUSTRIAN AGRICULTURE.—From *Wahre Jacob* (Berlin).



THE COLONNADE, CRESCENT, AND CASCADES,—THE LOUISIANA PURCHASE EXPOSITION, ST. LOUIS, MISSOURI.

THE LOUISIANA PURCHASE EXPOSITION.

BY FREDERICK M. CRUNDEN.

"THE Louisiana Purchase was the greatest real estate speculation the world has ever seen." How speculative the transaction appeared at that time is shown by the dismal forebodings and dire prophecies of those opposed to it. It would depopulate the East; it would disrupt the Union; the incorporation of the region in the federated States would "be the greatest curse that could befall us;" and "even supposing that this extent of territory was a desirable acquisition, fifteen millions of dollars was a most enormous sum to give."

"To me," said Josiah Quincy, "it appears that this measure would justify a revolution; . . . if this bill passes, the bonds of this Union are virtually dissolved," etc., etc.

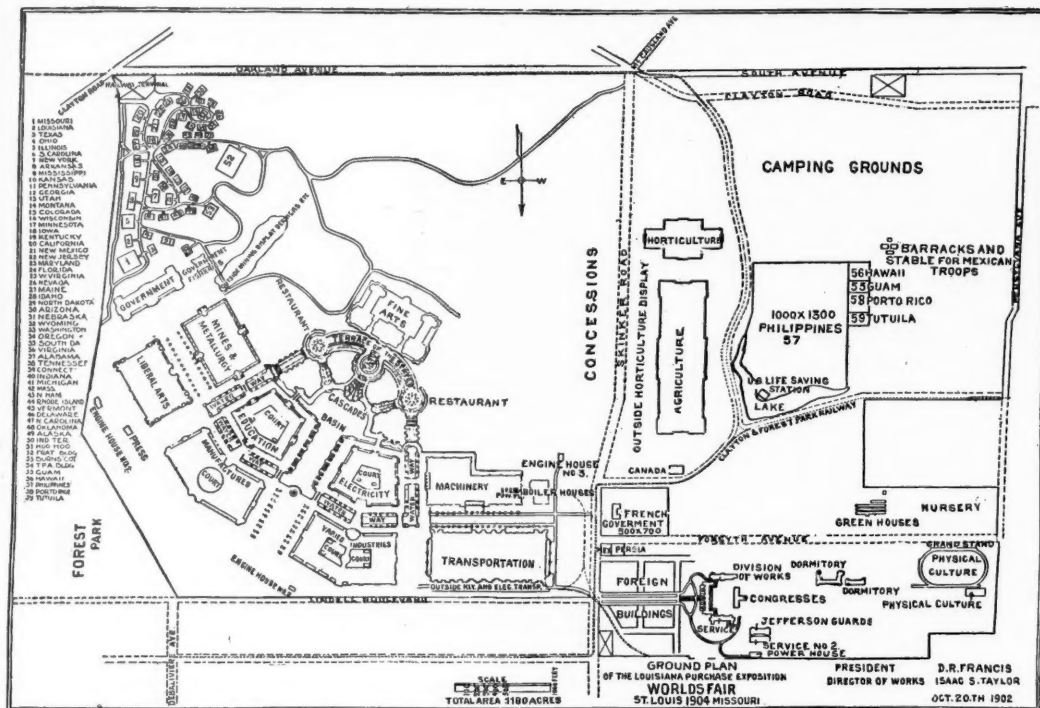
The question of the extent of the Louisiana Purchase has been fully discussed; and while there was at the time of the sale a confessed indefiniteness as to its boundaries, it appears to be settled that it did not include any of the area east of the Mississippi or the region west of the Rocky Mountains. Our title to those lands rests upon other bases. As thus properly restricted, the Louisiana Purchase has added to the United States the whole or the greater part of fourteen States and Territories,—Arkansas, Missouri, Iowa, Nebraska, North and South Dakota, Minnesota, Kansas, Colorado, Montana, Wyoming, Louisiana, the Indian Territory, and Oklahoma

Territory. It covers 875,025 square miles, or 560,016,000 acres. A more vivid conception of what these figures mean may be derived from Mr. Binger Hermann's comparisons: "Its area is more than seven times that of Great Britain and Ireland; more than four times that of the German Empire, or of the Austrian Empire, or of France; more than three times that of Spain and Portugal; more than seven times the size of Italy. . . . It is also larger than Great Britain, Germany, France, Spain, Portugal, and Italy combined."

The region now has a population of 15,000,000, with an assessment, in 1900, of \$6,616,642,829, which, of course, is far below the real value of the property. A very satisfactory return for the original investment! It must be remembered that the interest has not been compounded; it has been drawn year by year to support the growing millions of population.

It was a great purchase, unparalleled in the history of real estate deals; but in its political significance it is even more noteworthy. It is impossible to conjecture what fierce and prolonged conflicts were thus averted, what waste of life, what destruction of property, what retardation of progress, what harassing political complications.

Next to the Declaration of Independence, which made us a nation, the Louisiana Purchase

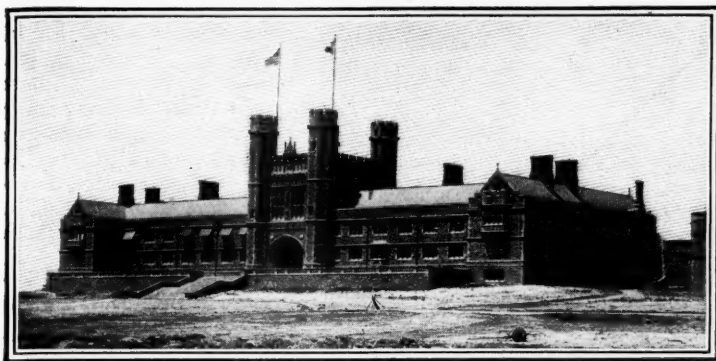


is the greatest event in American history; and there is no other that can compare with it except the close of the Civil War, which made us again one nation, with one flag, one motto, and one Constitution,—and that forever freed from the blot of slavery. So for more than sixty years to come, there can be no centennial anniversary that can equal in its significance and import this approaching celebration of the Louisiana Purchase. According to the magnitude of the event should be the manner of its commemoration and the majesty of its memorial. As the place for holding this festival of rejoicing, both sense and sentiment point to St. Louis, the portal and the metropolis of the vast region; and wisdom and propriety unite in declaring for a magnificent exposition, where all the nations of the earth will gather to show their best achievements, to teach and to learn from one another, to note the advances made even in the decade since the Columbian Exposition or the shorter period since the Paris Exposition, and to see with their own eyes this most optimistic object-lesson,—how a single century of free institutions and unfettered enterprise can transform a wilderness into populous, rich, and progressive commonwealths. Great was the historical event; and great will be the pageant, the panorama, the

world-epitome that is to mark its hundredth anniversary.

A complete comparative table of the world's fairs from 1851 on, together with the four sectional American fairs, would be interesting and instructive, but space forbids. A few comparisons must suffice. At the first world's fair, in London, in 1851, there were 21 acres under cover; the Philadelphia Centennial had a covered area of 56 acres; Paris, in 1900, had 125 acres; Chicago, in 1893, 200 acres; St. Louis will have 250 acres, while the whole area included within the exposition fence will be 1,180 acres, of which 600 acres lie in Forest Park, and the rest on leased ground, west of the park. This is twice as much as was included in the site of the Chicago Exposition. There still remain 771 acres of Forest Park outside the fair grounds, furnishing a beautiful background and surroundings.

The St. Louis fair has a broader financial foundation than any of its predecessors, starting with \$17,000,000 in hand, or available as soon as needed. Of this, \$5,000,000 comes from the individual subscriptions of St. Louis citizens, \$5,000,000 from bonds voted by the municipality, \$1,000,000 voted by the State of Missouri, and over \$6,000,000 from the United States Government. Thus far, forty-two States have voted



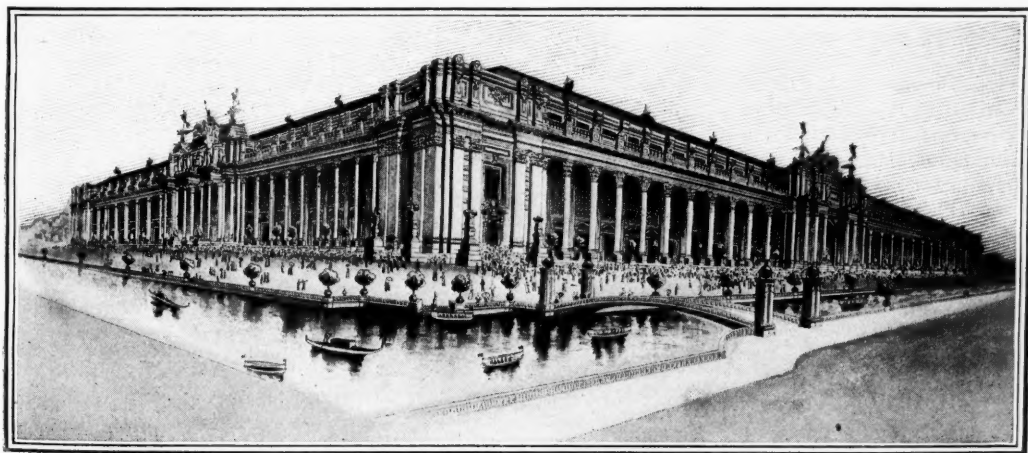
THE ADMINISTRATION BUILDING.

appropriations aggregating over \$5,000,000, much of it merely for preliminary work. The principal foreign nations have signified their intention to be well represented. And to all this must be added large sums to be expended by the concessionnaires, bringing the whole outlay to a probable total of fifty million dollars.

Mere cost and bigness do not constitute excellence, but magnitude is impressive, and money does things. The St. Louis World's Fair, however, has other things to recommend it than size and expenditure. In the first place, the topography of the site favors effects that could not be achieved on the flat of Jackson Park. The view from "The Apotheosis of St. Louis" across the Grand Court along the broad avenue between the Education and the Electricity buildings, thence across the Basin and up the Cascades to Festival Hall and the Terrace of the States, will doubtless surpass any spectacle heretofore

seen at a world's fair. This is the central physical feature of the exposition. A crescent-shaped hill crowned by the Colonnade of the States, with the imposing Festival Hall in the center of the crescent; on each extreme of the crescent, 1,900 feet apart, an ornamental restaurant pavilion; a central cascade 290 feet long, with a total fall of 80 feet in twelve leaps ranging from 4 to 14 feet, and side cascades 300 feet long, with a total fall of 65 feet. The

water will be discharged into a basin 600 feet wide. The two miles of lagoons have their beginning and end in this basin. The abundant supply of water will be drawn from the city mains, but will be filtered to a crystal clearness. Between the cascades will be gardens. Each of the cascades will be framed in sculpture, consisting of sportive groups of nymphs and naiads and other mythological fancies. The center cascade will be crowned by a group composition showing Liberty lifting the veil of Ignorance and protecting Truth and Justice. The east cascade will represent the Atlantic Ocean, and the west cascade the Pacific, the symbolism being that the Purchase has extended liberty from ocean to ocean. Assurance is given that the three cascades will completely eclipse the cascade of the Trocadero at the Paris Exposition, the cascade at St. Cloud, and the Chateau d'Eau at Marseilles.



THE EDUCATION BUILDING.



THE OLD LOG CABIN, NEAR ST. LOUIS, IN WHICH GENERAL GRANT LIVED WHEN HE WAS MAKING HIS LIVING CHOPPING WOOD, BEFORE THE CIVIL WAR.

Festival Hall is a circular building with a diameter of 192 feet; its dome will have a diameter equal to that of St. Peter's; and, standing upon a terrace 60 feet high, it will tower 250 feet above the level of the Grand Court. The seating capacity of the building will be 3,500, besides some hundreds on the stage. The restaurant pavilions are 120 feet in diameter and 150 feet high. They will be plastered and frescoed, and will cost \$169,480. Place for diners will be supplied on four levels.

Back of the Colonnade of the States is the rising Art Palace, a brick structure, the main portion of which is to be a permanent addition to the attractions of Forest Park and to the educational resources of St. Louis.

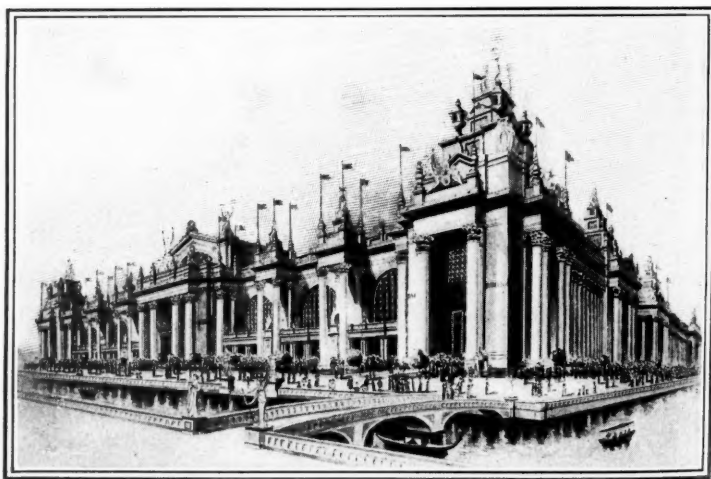
The Colonnade of States will be 1,000 feet long, consisting of two rows of Ionic columns 65 feet high, supporting a massive entablature. These columns form arcs, in each of which is a pedestal supporting a statue of a seated draped female figure, symbolic of one of the States or Territories formed from the Louisiana Purchase.

The statues are twenty feet high; and, designed by different sculptors, they fulfill Poe's definition of

the essential character of a poem, "variety in uniformity." The approaches to the cascades will contain portrait statues of aborigines, discoverers, pioneers, and statesmen, such as De Soto and Marquette, Lewis and Clark, Livingston, Monroe, and Franklin, Daniel Boone and Sitting Bull. The heroic statues of Jefferson and Napoleon, the former by Daniel C. French, the latter by J. Q. A. Ward, will stand at the edge of the big basin.

Sculpture will be an interesting and striking feature of the exposition. The appropriation for this department is five hundred thousand dollars, of which

about one hundred thousand dollars is for permanent work. The general scheme is designed to symbolize the history of the Louisiana Territory, representing the four successive occupants of its soil: First, the wild animals; second, the Indians; third, the discoverers and pioneers, the hunters, trappers, and explorers; and fourth, the advanced races, French, Spanish, and American, that have built up its present status of civilization. The sculpture will symbolize activities rather than actors; hence, portraiture will be but moderately used. The figures throughout will be of heroic cast, in



THE ELECTRICITY BUILDING.



THE PALACE OF FINE ARTS.

harmony with the size of the buildings, grounds, courts, and open spaces.

I have given considerable space to the Grand Court, the Cascades, and their surroundings because they constitute the central and most impressive objective feature of the exposition. Festival Hall is in the exact center of the picture made by the Cascades; and from it, as also from the Art Palace, a little above and south of it, the whole glorious cyclorama of the exposition spreads out like a completely opened fan.

Space will not permit of any attempt at a detailed description of the principal buildings, or even an enumeration of all the buildings and special exhibits. Speaking again in quantitative terms, there will be twelve splendid exhibit palaces, almost every one of which will be larger

than any one of the eight main structures of the Columbian Exposition, except that devoted to manufactures and liberal arts; and any one of the large buildings at St. Louis will cover virtually as much space as was occupied by all the exhibit buildings of the Pan-American Exposition.

In extent, magnitude, and expenditure, then, the Louisiana Purchase Exposition stands pre-eminent over all its predecessors. It seems unlikely, unreasonable, to suppose that the architects, designers, sculptors, and landscape and other artists have learned nothing from the recent successes at Chicago, Buffalo, and Paris, that with these experiences, and with the topographical advantages referred to, the picture will be in any degree inferior to that of Chicago,



THE MISSOURI STATE BUILDING.



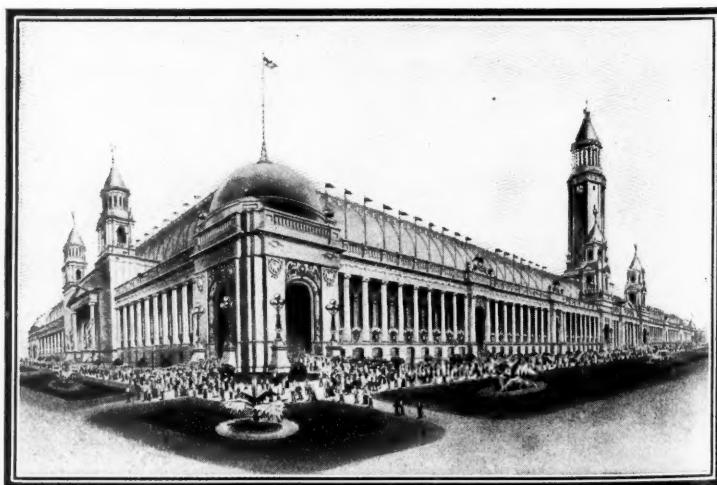
THE MACHINERY BUILDING.

which the Rev. F. H. Stead (brother of W. T. Stead) said gave him a realization of the vision of the Apocalypse. If, in its *ensemble*, it comes up to the Columbian standard, visitors will be repaid for world's-end journeys to see it. But there is good promise that the brightness and the splendor of the City by the Lake will be surpassed by the beauty, the charm, and the magnificence of the City in the Forest.

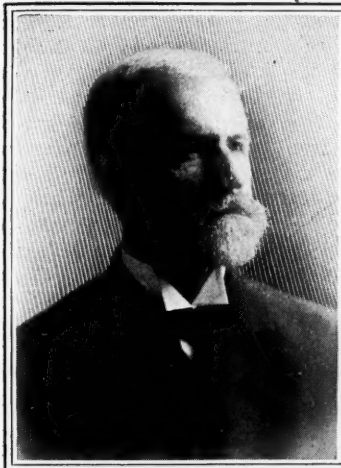
The St. Louis fair not only has the advantage of coming latest in a series of international expositions, with the lessons of its predecessors recorded for its benefit; but, above and beyond that, the details of its organization and direction are in the hands of men who have become experts in such work through their connection with previous expositions. Mr. Skiff, director of exhibits, and Mr. Rogers, director of the Department of Education and director of congresses, bring to their offices the experience gained by similar service at the Chicago and the Paris expositions. They are, emphatically, exposition experts; and one of the results of their former experience is that the exhibits of the Louisiana Purchase Exposition will have a more scientific and comprehensive and detailed classification than any of its predecessors. Dr. Selim H. Peabody was chief of the Department of Liberal Arts at the Columbian Exposition. He was editor and

statistician to the United States commissioner-general at the Paris Exposition of 1900. He was chief of the Department of Liberal Arts at the Pan-American, and superintendent of awards at Charleston. Professor Ives' whole life had been a preparation for the directorship of the Department of Fine Arts at Chicago; and that notable experience fitted him for still better service to his own city. A number of the subordinates bring to this fair the knowledge and training they acquired in

previous expositions. The secretary, Mr. Walter B. Stevens, is a man of wide and varied knowledge and experience. He knows men and their mainsprings of action. He is cool, affable, and even-tempered, and gives, always, the impression of reserve power. In my boyhood, there was current in this region a saying—I have scarcely heard it of late years—"He knows how to run a hotel." This was used as a condensed summary of all the qualities that go to make up a thoroughly sagacious and efficient man. If revived now, this condensed encomium would be more forceful if put: "He knows how to run a newspaper." Mr. Stevens "knows how to run a newspaper," and no more need be said. The treasurer, Mr. William H. Thompson, president of the Bank of Commerce, has been from the



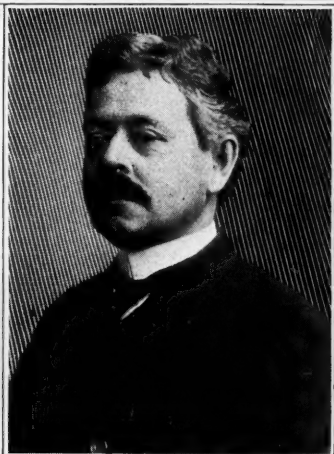
THE VARIED INDUSTRIES BUILDING.



MR. WALTER B. STEVENS.
(Secretary.)



MR. ISAAC S. TAYLOR.
(Director of Works.)

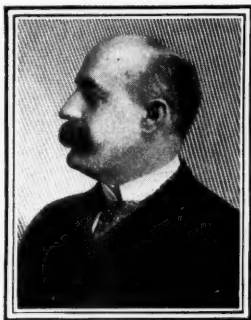


MR. FREDERICK J. V. SKIFF.
(Director of Exhibits.)

beginning the financial corner-stone of the enterprise and its persistent promoter. The results in Mr. Taylor's department are at present the most conspicuous of all, and speak for themselves in tones of Stentor shouting through a megaphone.

But with due credit to all the other men who have helped and are helping to make the Louisiana Purchase Exposition, St. Louis would have had no world's fair but for David Rowland Francis, ex-mayor, ex-governor, and ex-Secretary of the Interior. There is no other man in the State of Missouri who has the rare combination of qualities and characteristics, physical, mental, and temperamental, that has enabled Mr. Francis to work up public sentiment in St. Louis and bring to his support a large body of able citizens, to secure from Congress a grant of \$5,000,000, to persuade legislatures and convince commercial bodies, to organize the exposition and keep in touch with every part of the administration, and finally to storm the palaces of Europe and capture their royal occupants. Mr. Francis has good reason for believing in his "star." He is a "lucky man;" but his career illustrates the truth of Lowell's lines:

"What men call luck
Is the prerogative of valiant souls,
The fealty life pays its rightful kings."



MR. HALSEY C. IVES.
(Director of Fine Arts.)

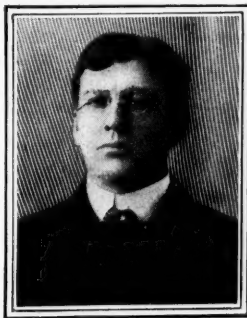
SPECIAL FEATURES.

There will be, of course, at this fair all the stock exhibits of agriculture, transportation, machinery and mechanical devices, manufactures of all kinds, electricity, etc., only on a larger scale than ever before, and brought up to the latest discoveries, inventions, and appliances, and the latest designs and fashions. But aside from the progress shown in the lines of previous exhibits, there will be novel features which will serve to distinguish this fair from all others.

AERONAUTIC COMPETITION.

The great scientific achievement of the past year has been wireless telegraphy, which every one will have a chance to witness at the St. Louis Exposition; and it may be that this exposition

will be signalized by the realization of man's long-cherished dream of aerial navigation. There is probably no one feature that will attract so much attention as this. The importance given to it by the management is shown by the appropriation of two hundred thousand dollars for aeronautic competition. The grand prize in this contest will be one hundred thou-



MR. HOWARD J. ROGERS.
(Director of Education, Director of Social Economics, and also Director of Congresses.)



HON. D. R. FRANCIS.
(President of the St. Louis Exposition.)

sand dollars. Fifty thousand dollars is to be given for minor and subsidiary prizes for competition between air ships, balloons, air-ship motors, kites, etc. The remaining fifty thousand dollars is reserved for the expenses incident to the competition. A code of rules has already been announced.

The course, in the shape of the letter L, will not be less than ten nor more than fifteen miles long; and its completion will include the circumnavigation of the two captive balloons that mark the ends of the course. This will probably be the most sensational feature of the fair, because of its novelty, and because of the exciting possibilities it places before the imagination.

FUEL AND REFRIGERATION.

Considering what an essential factor fuel is in domestic comfort and industrial progress, few exhibits should be of greater interest than those which deal with the problem of producing an economical and smokeless fuel. Our experience during the past winter emphasizes the importance of this subject. Long-continued scarcity in Europe has stimulated men's wits to find other sources of heat than the primitive supply of wood and coal. The fair will exhibit briquette-making machinery from England, France, and Germany, and show the processes of making briquette fuel, which is said to be practically

smokeless, besides being convenient in form and very low in price. There will also be an extensive exhibition of smoke-consuming (or preventing) devices, which, their inventors claim, will effectually demonstrate that virtually all of the smoke issuing from the poorest fuel through the shortest stacks may be consumed. Briquettes and smoke-consuming devices do not stir the blood and fire the fancy as do air ships; but cheap and smokeless fuel would do more for the comfort and advancement of mankind in a decade than aerial navigation would be likely to do in a century.

While fuel is absolutely essential to manufactures and commerce, and in most civilized countries to comfort and even life itself, refrigeration has come to be, if not a necessity, at least the prime luxury of civilized life. Artificial refrigeration is not a novelty; but it will be exhibited on a more extensive scale and applied to a greater variety of purposes than ever before. The building will be 320 x 210 feet, and 50 feet high. In this, besides considerable cold-storage room, will be all kinds of refrigerating-machines, large and small. Ice enough to supply the whole fair will be made here; and refrigeration will be furnished through pipe-lines to subscribers in all parts of the grounds. Besides the ordinary uses of cold storage,—cooling water, freezing ice-cream, etc.,—the enormous refrigerating power of this plant will probably be utilized to cool one or more of the large restaurants or theaters, and will supply an artificial-ice skating-rink, where opportunity will be offered to watch fancy skating and to skate for pleasure. There will be cooled rooms for resting; but in the rink, at least, no one need suffer from heat, and wraps



OLD CABILDO, AS BUILT BY ALMONASTER, 1704, AND CORNER OF THE PLAZA.

(Where the transfer of the Province of Louisiana, from France to the United States, was made. To be reproduced as a State Building by the Commonwealth of Louisiana, at the Louisiana Purchase Exposition.)



THE MINES AND METALLURGY BUILDING.

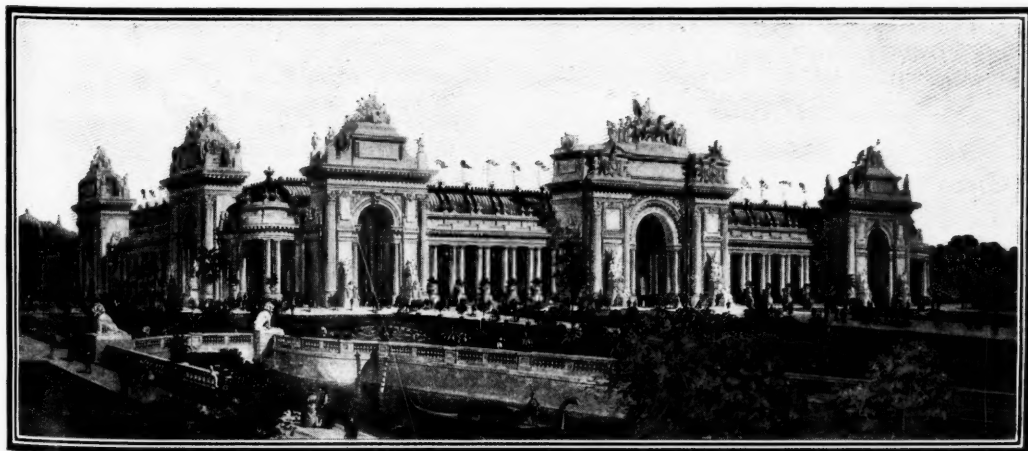
will be provided for protection against cold. The possibilities of refrigeration and artificially moderated temperature will be shown as they have never been shown before.

Contributions to the solution of the important problems of locomotion and transportation will be made through a comprehensive display of automobiles, including specimens from the factories of all countries, and also through an extensive exhibit of improved devices for the operation of street railroads.

The dominating spirit, the distinguishing characteristic, of the exhibits throughout will be activity,—life, color, motion. The central motive is not products, but processes,—machinery in operation, the process of manufacture of an article shown in full, the transformation of material from the raw state to the finished, mar-

ketable commodity. This applies to agricultural and horticultural exhibits as well as to manufactures. It will, indeed, apply also to mining, for a representation of a mine with the actual processes carried on in it will be shown in the hillside adjoining the Palace of Mines and Metallurgy.

That never-failing attraction of all expositions, an aquarium, will be supplied on a very large scale by the United States Government; and something not so common and still more beautiful will be an aviary in the form of a colossal bird-cage, 235 feet long, 92 feet wide, and 50 feet high. This will be so placed as to include trees, shrubs, and pools of water, giving the surroundings the aspect of a forest with its feathered denizens choring in fancied freedom. A special attraction throughout the grounds will



THE PALACE OF LIBERAL ARTS.

be the lawns, trees, flowers, and shrubbery, and the old forest in the background. The interior courts will have a semi-tropical appearance, and will furnish cool, shady resting-places after the fatigue of sightseeing.

"The proper study of mankind is man."

There is no element of foreign travel of greater interest than the observation of the peoples,—their appearance, dress, customs, habits, and occupations. The privilege of extensive

There will also be a four-manual organ with one hundred and forty-four stops, operated by electricity,—the largest ever constructed.

In a short magazine article, it is hardly possible merely to enumerate the many attractive features of the coming exposition. I can do no more than mention the Olympic Games, the great athletic contest of ancient Greece, which, under the leadership of Baron de Coubertin, was revived at Athens in 1896 and repeated at Paris in 1900. This great contest was to have been



THE TRANSPORTATION BUILDING.

travel comes to few—very few. But the modern world's fair brings to us the peoples of all countries and of every stage of civilization. The visitor to St. Louis in 1904 will be able to see races from all parts of the world, representing every phase of development, in their habit as they live. In one sense, the whole fair is an ethnological exhibit; but the exhibit in the Department of Ethnology proper will be extensive, and will form one of the most interesting and instructive features of the exposition. In this department, interest is likely to center in the Philippine exhibit, which will cover forty acres and cost over half a million dollars.

FINE ARTS AND MUSIC.

Of architecture, sculpture, and landscape design, which make up the visual *ensemble* of the exposition, I have said as much as space permitted; and to the sister arts, painting and music, I can give but few words. As to the former, I refer again to the palace on Art Hill, and repeat Professor Ives' assurance that the collection there will surpass all exhibits heretofore seen in this country.

Music will be represented on a colossal scale. Nearly half a million dollars will be devoted to this department. Bands from all nations will be there, which, upon occasion, will be assembled into one great band of two thousand pieces.

next year at Chicago, and would have drawn tens of thousands to that city; but Chicago graciously waived her claim in our favor.

I can hardly close without reference to that part of the exposition which, it seems, will always go by the accidental name given to it at Chicago, "The Midway." Many novel features are promised, and assurance is given that this section of the fair will not only not contain anything unclean, but that fakes and impostures, however harmless, will not be tolerated.

INTERNATIONAL CONGRESSES.

The exposition will be one vast educational object-lesson, from which even the casual observer may gather more information than from ten times the money and time spent in travel. But all its utilities and beauties and glories are but the concrete embodiment of ideas that existed in the minds of men all over the world; they are "the outward vesture of a thought." Therefore, the culminating educative feature of the fair will be the congresses, national and international, which will meet there. The building assigned for the meetings of the congresses is what will be, after the fair, the library of Washington University. The whole group of the new buildings of the university will be utilized by the fair, as University Hall is now used for the Administration Building.

ST. LOUIS—A STRONG WESTERN CITY.

BY WILLIAM FLEWELLYN SAUNDERS.

WITH a majestic curve, the Mississippi River, half a mile wide, flows by St. Louis and forms its eastern boundary, like a huge bow, inclosing the fourth city of the United States, with its six hundred and fifty thousand people, between horns nineteen miles apart. The western boundary, twenty-one miles long, makes a very obtuse angle about the city, like a string extending from horn to horn of the bow, and an arrow drawn to its head on this bow and string would be six and one-half miles long. Just above the city on the north is the mouth of the turbid Missouri River, and just below the city on the south is Jefferson Barracks, one of the most important military posts in the West. Outside of the western boundary as far as twenty miles from the river are beautiful suburban villages, linked to the city by trolley and steam roads. On the other side of the river are East St. Louis, Granite City, Venice, and Madison, manufacturing and railway suburbs which keep one hundred thousand people busy, and two huge steel railway and vehicle bridges and many railway and passenger ferries connect this mass of industry with the city. High grain-elevators pierce the sky line

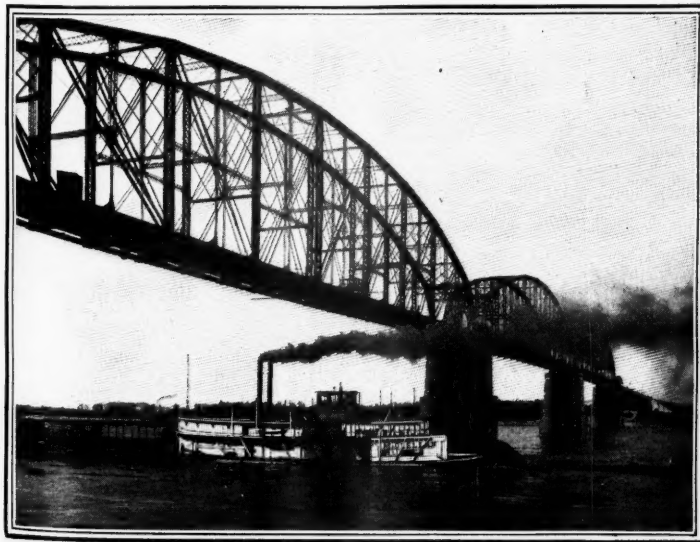
along the levee on both sides of the river. For twenty miles north and south of the city, up and down the great river, are scattered, in smaller towns or well-to-do isolation, the homes of people of the city, some in beautiful situation on high bluffs, some in picturesque woods on the shore. Steamboats carrying freight and passengers, and powerful tugs towing deeply laden barges, pass going toward New Orleans and St. Paul. Boxing the compass in their approach so that they look like the spokes of a wheel, twenty-seven railways enter the city and carry its products to the thirty-two million people who have their homes within a radius of five hundred miles.

THE APPEARANCE OF ST. LOUIS.

St. Louis covers sixty-two and one-half square miles, and rises from its river front on a series of undulating terraces that become gentle hills beyond the western boundary, seven miles from the river.

Nearly five hundred miles of the nine hundred miles of streets of the city are well paved, those in the business district—which is a rectangle of one mile along the river and two miles back

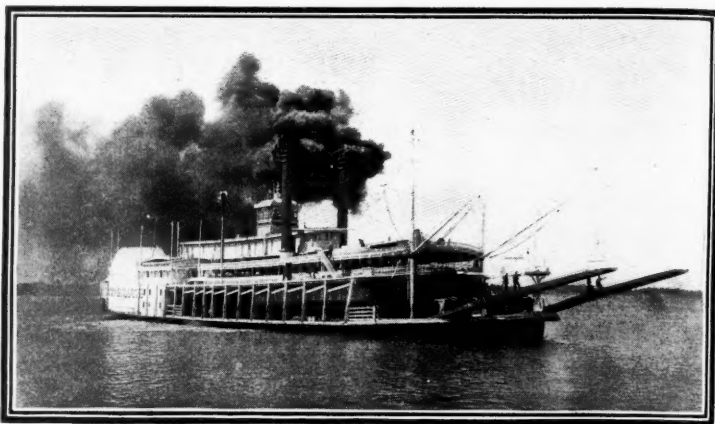
from it—with granite, and those in the dwelling parts of the city with asphalt, brick, and telford. Many of the down-town granite streets are now being surfaced with asphalt to do away with the noise. The streets run straight north and south, or east and west, except the very long ones like Broadway, which runs with the curve of the river the whole nineteen miles of the city's length, Grand Avenue, which follows the western boundary, half-way between it and the river, joining Broadway at its northern and southern ends, and the King's Highway, which hugs the western boundary more closely than Grand Avenue. This street, a thoroughfare of pioneer



THE MERCHANTS' RAILWAY BRIDGE BETWEEN ST. LOUIS AND GRANITE CITY, A MANUFACTURING SUBURB.

days, passes by the two most beautiful parks, Forest Park and Tower Grove Park, and is being made a charming boulevard. The streets and houses are numbered from the river west, running one hundred numbers to the block in perfect regularity. For example, one will find No. 4517 Olive Street about the middle of the block between Forty-fifth and Forty-sixth streets. With like system, the houses on the streets running north and south are numbered in each direction from Market Street, a long street which runs east and west from the river to the limits. The stranger, set on the right street, may know by the number of the house to which he is going exactly how far it is, and he is delighted to see on each corner signs bearing the street names.

Broadway, which, being Fifth Street, is five blocks from the river, and Olive Street, which runs from the river, as the crow flies, to the western limits, touching the World's Fair grounds, are the busy retail streets, and Washington Avenue, which parallels Olive Street three blocks north, is the wholesale street. On Olive street and



A ST. LOUIS RIVER PACKET.

Broadway are most of the tall buildings of the city, and the ground here is most valuable. This year, twenty thousand dollars a foot was asked of a firm that wanted to put up a big building. Of course, to most buyers, nothing but high office buildings will pay the interest on an investment like that. Yet several wealthy concerns,—the Mercantile Trust Company, the Mississippi Valley Trust Company, the St. Louis Union Trust Company, the *Republic* newspaper, and the American Exchange Bank,—in a spirit of protest against the sky-scrapers, have lately built two and three story homes for their businesses down

town, on ground worth from twenty-five hundred dollars to eight thousand dollars a foot. The architecture of these low buildings is most beautiful, and the contrast with the surrounding buildings is very striking.

The big hotels of the city are all in the downtown business district, and the largest new ones are being built there also. There are many hotels and great apartment-houses in the western part of the city, patronized principally by people with families who do not wish to undertake the responsibilities of housekeeping. A canvass of the city lately made shows one hundred and five hotels in all, with five more being built.

Transportation is altogether by trolley lines, of



A CONTRAST BETWEEN TALL BUILDINGS IN ST. LOUIS.

(The Missouri Trust Building, the Chemical Building, the Holland Building, and the low Republic Building, on Olive and Seventh streets.)

which there are 321 miles in the city, and 100 miles more connecting suburban towns. These cars run fast, and the clerk, mechanic, or laborer can afford to live ten miles from his business, on the edge of the city, where land is cheap, or even outside. This is why there is little of the squalor in St. Louis that is found in other very large cities. There are tenement-houses for the very poor, but no slums. The richer a St. Louis man gets, the farther from the river he moves; and when he feels able to spend two hundred thousand dollars on a house, keep a carriage, become a guarantor for the Symphony Orchestra, and live three months of the year in Europe, he builds a beautiful home in one of the many charming "places" in the western part of the town, where he has privacy, plenty of room, and neighbors as wealthy as he. Yet, even this most expensive land, so uncrowded still is St. Louis, is not worth as much as the best dwelling property in other large cities. A home in Westmoreland Place, St. Louis, can be bought for \$250 a foot. The best dwelling property on Fifth Avenue, in New York, costs \$11,000 a foot; on the Lake Shore Drive of Chicago, \$1,300 a foot; in Rittenhouse Square, Philadelphia, \$5,000 a foot; on Commonwealth Avenue, in Boston, \$1,200 a foot; in Washington Place, Baltimore, \$1,000 a foot; and on Euclid Avenue, in Cleveland, \$350 a foot. Outside of these aristocratic "places," beautiful homes are built on land that sells at from twenty dollars to one hundred and fifty dollars a foot. Home-building has been extensive in the last ten years. During the two years just past, twenty-six million dollars went into houses, and this year twenty million dollars will be spent. Half of this will build hotels, theaters, and apartment-houses, under the World's Fair stimulus, but most of the other ten millions will come from people of small income who are building modest homes. Philadelphia, by the way, is the only city that ranks St. Louis as to the home-owning of its people.

THE GROWTH OF ST. LOUIS COMMERCE.

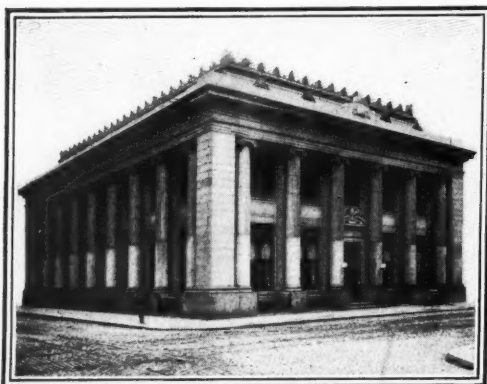
Since St. Louis was founded as a fur-trading post, in 1763, by Pierre Laclède Liguest and



ST. LOUIS, MO., BROADWAY AND LOCUST STREET.

the Chouteau youths, it has grown to be the supply point for the South and Southwest, and a great part of the Northwest, the West, and Mexico. The commerce of the city to-day covers nearly a million square miles, and the business done by its merchants has nearly doubled in the last ten years on account of railway extensions. Last year, all the railways in the United States built 5,549 miles of new lines, and nearly half of this, 2,600 miles, was laid in Missouri, Oklahoma, Indian Territory, Texas, Arkansas, Louisiana, and New Mexico, joining and nourishing towns already built, causing others to spring up, and stimulating the settlement of a vast and productive agricultural and stock country, all of it looking directly to St. Louis as its market. These railways and the steamboat lines carried in and out of St. Louis, last year, thirty million tons of merchandise.

St. Louis is the fourth city of the United States in manufactures as well as in population. It has seven thousand manufactories, whose product for 1902 was sold for three hundred and ninety million dollars. It is first in the manufacture and sale of tobacco, beer, woodenware, and steam and street railway cars, and in the distribution of dry goods, footwear, hardware, and furs of the cheaper sort. It is next to Boston as a wool market. The city sold more dry goods last year than anything else, the volume of business in that line being



THE MERCANTILE TRUST BUILDING.

(At Eighth and Locust streets, standing on ground worth \$4,000 a foot.)

one hundred and twenty million dollars, one house selling nine million dollars' worth. Eighteen million dollars' worth of beer was sold, twenty-six million dollars' worth of tobacco, forty million dollars' worth of footwear,—of which seven million dollars' worth was sold by one firm,—thirty-five million dollars' worth of hardware, ten million dollars' worth of woodenware, and fifteen million dollars' worth of railway cars of all kinds.

Next to these prodigies of success come several lines of trade in which St. Louis leads the West but not the whole country, such as drugs, paints and oils, hats and caps and gloves, agricultural implements and vehicles, millinery, silk, clay products,—especially the finer kinds,—paper, trunks, groceries, glassware, furniture, hides, railway and electrical supplies, candies, stoves, lumber, flour, and chemicals.

The most concentrated expression of the business of a city is its post-office. The St. Louis postal business increases about 20 per cent. yearly. After all its expenses were paid, it turned, last year, \$1,500,000 into the United States Treasury. The office employs fifteen hundred clerks and carriers. Its postmaster, Mr. F. W. Baumhoff, has carried the plan of branch postal stations beyond the system of any other city, and one hundred and fifty of them are scattered about St. Louis. The main office is the only

one in the United States which is kept open day and night. Pneumatic mail tubes will be laid, this year, from the main office to the Union Station, and from the main office across the river, to get mails an hour earlier from Eastern trains. Congress has appropriated nearly a million dollars for a second post-office building near the Union Station. This will be built this year, too, and will save the down-town office from handling half of the present enormous mass of mail. By running postal cars on suburban trolley roads, carrier delivery has been extended from the city to the suburban towns.

It will surprise most people to learn that St. Louis publishes more books, magazines, periodicals, and newspapers than Boston or Chicago. Postal figures show that only New York and Philadelphia circulate more reading matter than St. Louis does.

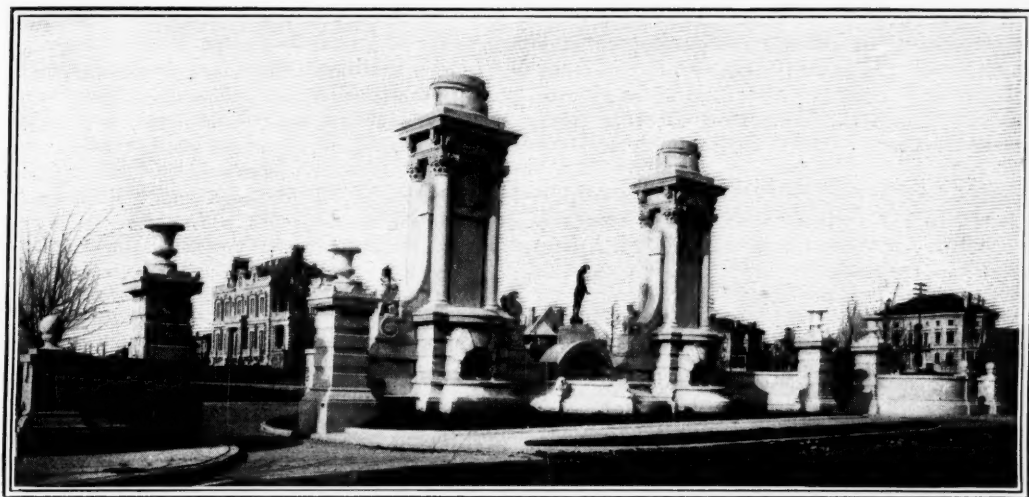
The Business Men's League and the Merchants' Exchange are the two organizations of St. Louis which represent the commercial interests in matters that require action. They work unitedly, are both rich, and their membership includes all the influential and progressive men of the city. Cyrus P. Walbridge, president of the Business Men's League, is at the head of a prosperous wholesale drug business. He has been mayor of St. Louis, is a public speaker of celebrity, and being in his vigorous prime, has a distinguished future before him. Theodore R. Ballard, president of the Merchants' Exchange, is a successful business man who is just coming into active public life.

A COMPREHENSIVE TERMINAL SYSTEM.

In all the great commercial cities, the problem of maintaining adequate railway terminals has



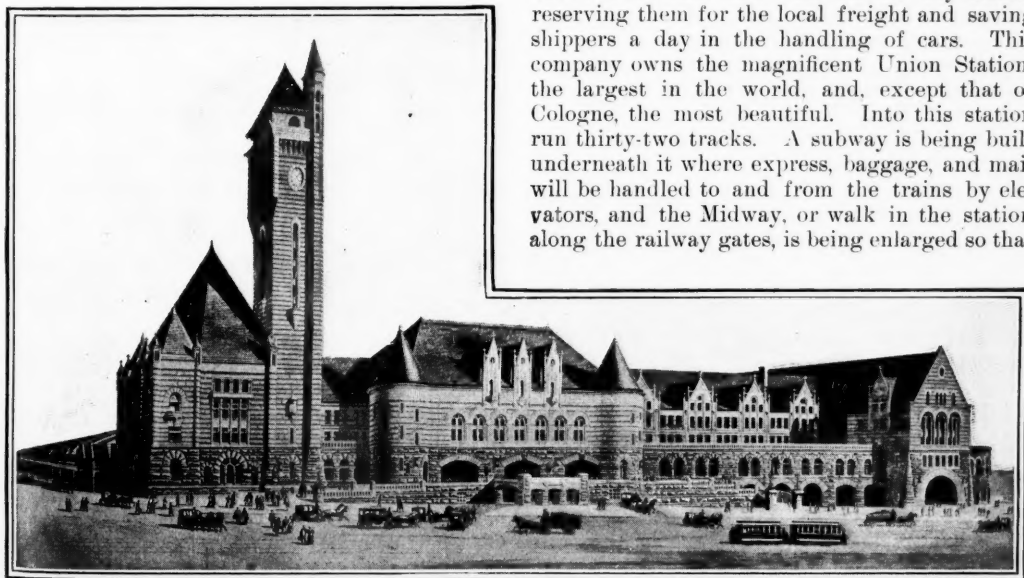
PORTLAND PLACE, DWELLINGS OF THE WEALTHY IN ST. LOUIS.



GATEWAY TO KINGSBURY PLACE, SHOWING DWELLINGS OF THE WEALTHY.

become, in the last few years, an intricate one, and solutions are costing millions. Disorder in a city's terminals means infinite distress to business, through delay of freight and loss of trade. In St. Louis, the foresight and energy of William S. McChesney, president of the company owning the terminals, has got this problem well in hand, and his work is reinforced most effectively by William K. Kavanaugh, a man who by

brain and tireless work built up a competitive terminal system of his own into such importance that the big company had to recognize it and assimilate it. This terminal company, which is controlled by all the trunk lines entering St. Louis, is now putting a belt around St. Louis and East St. Louis, the town across the river. This crosses the river north and south by railway ferries, and will keep all through freight between the east and west off the city tracks, reserving them for the local freight and saving shippers a day in the handling of cars. This company owns the magnificent Union Station, the largest in the world, and, except that of Cologne, the most beautiful. Into this station run thirty-two tracks. A subway is being built underneath it where express, baggage, and mail will be handled to and from the trains by elevators, and the Midway, or walk in the station along the railway gates, is being enlarged so that



THE ST. LOUIS UNION RAILWAY STATION.

(Thirty-two tracks run into this train shed.)

thirty thousand people may move about it in various directions at once. The tunnel under the city, famous for its discomfort, is no longer to be used by passenger trains. These, hereafter, will reach the Eads Bridge direct from surface tracks.

THE MONEY STRENGTH OF ST. LOUIS.

It was in 1893, when banks were going down everywhere in the country except in St. Louis, that this city made its reputation among the money men of the world. St. Louis now is regarded as next to New York in financial strength, and the South and the Southwest lean confidently on its banks and trust companies, whose financing is an active aid in developing the new country. Clearings, last year, were \$1,688,849,494, almost a billion dollars more than they were fifteen years ago. Deposits in the same time have increased seventy-six millions, amounting, last year, to \$120,947,932. The twenty banks and nine trust companies have a capital of \$42,315,800, a surplus of \$44,951,373, and resources amounting to \$306,812,526. They paid \$3,608,000 in dividends, last year.

THE CLIMATE OF ST. LOUIS.

As to climate, the people of St. Louis are pampered. Used to a comfortable temperature, one day of extreme heat or cold will make them groan, and two will cause the sound of their lamentation to fill the land. The heavy furs and top-coats of the rigorous north are seldom worn, and the occasional white linen suit in summer is stared at. The shirt-waist and seersucker of Southern cities are tabooed by the nice. The well-dressed man wears through the summer, in St. Louis, the clothes that he wears when he goes to Bar Harbor or Hyannisport, or to any other Northern resort.

The weather records of the signal service in St. Louis for thirty-two years back show an average of one hundred and thirty-five clear days in the year. The average temperature of the four hottest months of the year, during this time, was seventy-five degrees for June, seventy-nine degrees for July, seventy-eight degrees for August, and seventy degrees for September. For the winter months, the average temperature was, during these thirty-two years—for December, thirty-six degrees; January, thirty-two degrees; February, thirty-five degrees; and March, forty-four degrees.

In summer, when the days are hottest, the nights are cooled by a constant southern breeze, and the mildness of the winters is such that golf is played on the links of the eight golf clubs here all the year around.

THE ST. LOUIS PEOPLE.

Before the War, St. Louis was a Southern city, its affairs controlled altogether by men born in the South, but the immigration from the North and East has changed all that. Southern influences are still a great factor in St. Louis trade, of course, but the men directing the banking houses, the wholesale firms, and the big manufactories represent every State in the Union. A consensus of opinion upon any business, social, or political matter obtained in any club of the city would never show sectionalism.

The St. Louis type of man is the one common to all large American cities. He is well dressed, quick in movement, talking to the point, delighting in doing things. If he can afford it, he belongs to the Mercantile or the Noonday Club, where he dines, and to the St. Louis Club, where he lounges in tuxedo in the evening. He is a member of the Business Men's League and the Merchants' Exchange, so that he may touch elbows with the successful men of the city and be a part of the affairs that are going on. If he be college bred, he goes into the University Club. If he has indisputably achieved business or professional standing, he is asked into the Commercial Club or the Round Table.

The descendants of the first families of St. Louis are not distinguished in business nor on the surface socially. They are well-to-do by inheritance, and live exclusively and unostentatiously. It is not an extravagance to say that one who meets these Laclede and Chouteaus feels that their sweet and gentle manners could not have survived the jostling of modern conditions without a most persistent strain of aristocracy.

The negro population of the city is 6 2-10 per cent., which is only 1 4-10 per cent. more than Philadelphia has. New Orleans and Atlanta, two representative Southern cities, have—the first, 27 1-10 per cent. negro population, and the second, 39 8-10 per cent. St. Louis has also a very small foreign-born population, only 19 4-10 per cent. New York has 33 64-100 per cent.; Boston, 35 1-10 per cent.; Philadelphia, 22 8-10 per cent., and Chicago, 34 6-10 per cent. As a genuinely American city, therefore, St. Louis may rank itself first.

EDUCATION AND CULTURE.

Washington University is famous for the comprehensive system of schools it directs. There is a college proper, a law school, a medical school, an engineering school, a dental school, an art school, and three preparatory schools, one of which is for boys, one for girls, and the third a

manual-training school. Calvin M. Woodward, who directs this school still, originated the idea of training boys in the mechanical trades while they were taking the ordinary school course, and this school was the first of its kind in the world. Many similar schools have been established since elsewhere, and a number of the public schools of St. Louis have now manual-training departments. The university has, during the past few years, grown fast in influence and in wealth, and through large gifts, has been enabled to erect excellent buildings of modern equipment on a beautiful site just outside of the city. The university now has an endowment of seven million dollars, its possessions, through the gifts of Robert S. Brookings and Samuel Cupples of four million dollars, having increased fivefold in the last five years. Chancellor W. S. Chaplin came from Harvard to St. Louis originally, and he has succeeded, through many discouragements, in placing the university at the head of the educational system in this part of the country.

St. Louis University, which is directed by the Rev. W. Banks Rogers, is not rich, but is deeply rooted. It is a Catholic institution, founded by priests as an Indian school, in 1824. With the Seminary of St. Stanislaus, the university is now the most important training-school in the United States for the Jesuit priesthood. It is about to add a law and a medical school to its departments.

The public-school system of St. Louis, in the shaping of which William T. Harris had much to do, is modern, and is now getting money to carry out the excellent plans of the non-partisan board which controls its affairs, a board which is in fact not political, though elected. The schools provide for eighty thousand pupils, who are taught by seventeen hundred and forty-eight teachers. The income of the board is about two and a half million dollars a year, and three-quarters of a million dollars will be spent, this year, on new schools. The superintendent, F. Louis Soldan, is a man of ideas, broad culture, and is effective in carrying out his plans.

St. Louis is well equipped with libraries. The free public library, directed by Frederick M. Crunden, who has been the genius of its success, is the model for many cities, and so many of its pupils have been chosen, from time to time, to manage libraries elsewhere, often in the East, that the influence of its methods is widespread. Mr. Carnegie has been so impressed with this library's work that he has given one million dollars to it. Half of this will erect a building on a site covering half a

block down town given by the city, and the other half will add branch library stations to those already established. Mr. Crunden believes in bringing the library to the people through branches, and has put the utmost enthusiasm and hard work into this plan.

The Mercantile Library is a very old one, and has specialized itself as the popularity of the free library grew. It may now be characterized as a successful book club of large membership and peculiar St. Louis atmosphere, the librarian being Horace Kephart, a man admirably fitted by temperament and training for the duties. A membership in the Mercantile Library is a cachet of something more than mere respectability,—there is a flavor of social standing and of culture about it. Veneered people do not subscribe to the Mercantile Library.

St. Louis has a symphony orchestra, encouraged by a guarantee fund subscribed, from year to year, by the people. The musical director is Alfred Ernst, and the man who carries the financial responsibility upon his shoulders is John Schroers, one of the younger men of the city, who is making himself felt in a solid way, successful in his own business, and generous of his energy in public matters like this. So many male and female choruses are there in the city, including the German singing societies, that a mixed chorus of three thousand voices, already trained in their respective societies, is now being drilled for a World's Fair event.

ST. LOUIS AS A MUNICIPALITY.

St. Louis governs itself, and is not attached to St. Louis County. In national elections, it is Republican; in local elections, doubtful. The force of its independent vote is enormous, and it is felt in every election; but, unlike other large cities, an organized independent movement is never successful. In 1884, every office in the city was held by Democrats, and in 1897, every office was held by Republicans; now the Democrats have nearly every office again. The independent vote did this, resenting bad government. The present mayor of St. Louis is Rolla Wells, a rich manufacturer, whose chief ambition is to govern the city well, taking no thought of his political morrow. He was nominated by the Democrats and elected by the people, who were tired of a dishonest Republican administration. Mayor Wells is not a reformer, but he is aggressive in requiring efficient and honest work in the city departments. So far, he has been able to do little for the city, because he has not had the money. Next June, at a special election, the people of the city will vote upon a proposed bond issue of seven million dollars, to be

spent upon city improvements. If the people vote the bonds,—and it is likely they will,—Mayor Wells will be able to do the large things for the city which he has planned, and it is pretty certain that the money will be spent, under his



HON. ROLLA WELLS.
(Mayor of St. Louis.)

direction, so that the city will get its worth. With these bonds, the net debt of St. Louis will be thirty million dollars, which is not immoderate. The credit of the city in the Eastern and London markets is excellent. Its last bonds, an issue of five million dollars for the World's Fair, bearing 3.25 per cent. interest, sold readily. The average interest of the city bonds issued since 1885 has been 4.11 per cent. On a 70 per cent. basis, the assessed value of property is \$406,000,000, and the tax rate on the \$100 is \$1.95. The income of the city, this year, most of which will go for ordinary expenses, will be six and a half million dollars, and property-owners will spend several million dollars more for streets and boulevards, the city paying nothing for this purpose.

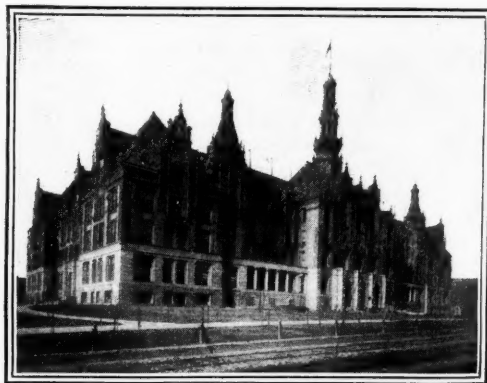
The city owns its water-works, for whose maintenance and improvement the entire water tax, about one and three-quarter millions a year, is spent, and the pumping and pipe equipment, consequently, is most efficient. Costly clarifying plans are now being executed.

The park system of the city gets much atten-

tion, and money is spent on it liberally. There are twenty public parks, containing 2,183 acres, a remarkably large park area for a city of the size of St. Louis.

THE FUTURE OF ST. LOUIS.

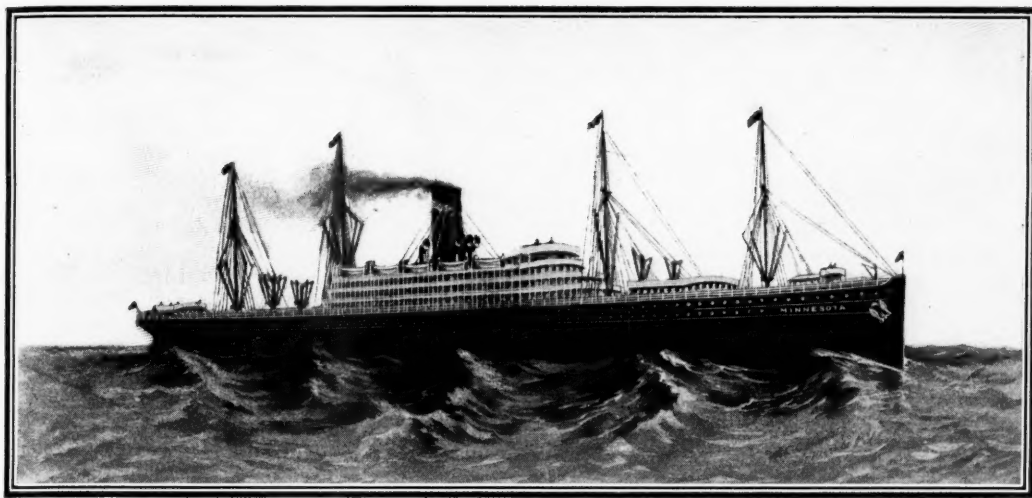
It is easy to see now what St. Louis will become. It will retain the trade territory it has already in the South, Southwest, and West, yearly becoming more valuable, and it will control the business of Mexico because of railway advantages. The cheap coal from the near-by mines in Missouri and Illinois, and the natural situation of the city as a distributing point, will increase the number of its manufactories. The Mississippi River, most of whose enormous commercial power is now wasted, will undoubtedly soon be used by the north and south rail-



THE CITY HALL, DESIGNED IN 1889.

ways to relieve their tracks of heavy freight which does not demand dispatch, and from this will come large and systematic river improvements, productive cultivation of a great part of the valley now neglected, and the building up of the small back settlements into prosperous towns.

The western limits of the city, within the next few years, will be extended about ten miles, to include the suburban towns, which have already built into touch with the city. Subway roads will be built before then, one running along Broadway north and south, and the other from the river west. Both plans are now under discussion, and bills for these roads are before the Municipal Assembly. The growth of the city for the past ten years has been so steady that it is fair to assume it will continue. If it does, and if the suburbs are annexed, the census of the year 2000 will give St. Louis eight hundred thousand people.



THE "MINNESOTA," OF THE GREAT NORTHERN STEAMSHIP COMPANY.

(As she will look when in commission January 1, 1904. Launched April 16, 1903, at the New London, Conn., shipyards.)

GIANT SHIPS FOR OUR ORIENTAL TRADE.

BY F. N. STACY.

IN the search for the wealth of the Indies, a tiny wooden bark, in 1492, brought Columbus to the Atlantic shores of America. In pursuit of the same quest, the bateau and birch-bark canoe of the *courrier du bois*, nearly two centuries later, brought Daniel Gresolon du Luth to the Lake Superior shore of northeastern Minnesota, within sight of the Mesaba range of the Ojibways. On April 16, 1903, a Minnesota transportation man, James J. Hill, taking up the mission of Columbus and du Luth in a practical American fashion, launches a giant steel palace, the steamship *Minnesota*, made of Mesaba range iron ore, to bring to the United States the wealth of the Indies in cargoes equal to one hundred train loads of twenty-five cars per train on each round-trip voyage of fifty days.

Thus are the dreams of the fifteenth century materialized into tangible fact by twentieth-century energy on a dazzling wholesale plan.

The past ten years of shipbuilding development have placed upon the high seas some wonderful creations in steel. In 1893, there appeared the *Lucania*, with 625 feet of length, 65 feet breadth, 41 feet depth, and a displacement of 19,000 tons. In 1898, the *Kaiser Wilhelm der Grosse* came forth, with 648 feet length, 66 feet breadth, 43 feet depth, and nearly twenty-two thousand tons displacement. The next year ap-

peared the *Oceanic*, the first 700-footer, of 68 feet breadth, 49 feet depth, and 28,500 tons displacement. Then came the *Deutschland*, of slightly smaller dimensions than the *Oceanic*, and, finally, in 1902, the twin giants, the greatest vessels on the ocean, the *Cedric* and the *Celtic*, 700 feet long, 75 feet broad, 49 feet deep, with a displacement of nearly thirty-eight thousand tons.

The *Minnesota* and the *Dakota*, built at the New London shipyards for the Great Northern Steamship Company, the one having been launched on April 16 and the other to follow in sixty days, have not the length of the *Cedric*, *Celtic*, or *Oceanic*, and they lack eighteen inches of the breadth of the *Cedric* and *Celtic*; but they are nearly seven feet deeper, and have a dead-weight cargo capacity one-half greater. Their length is 630 feet; breadth, 73 feet 6 inches; depth, 56 feet; and displacement, close to thirty-eight thousand tons. But whereas the *Cedric* has a dead-weight cargo capacity of 18,400 tons, which is the greatest of any vessel now doing business on the high seas, the dead-weight cargo capacity of the *Minnesota* will be, approximately, 28,000 tons. It will carry that many long tons of coal, or 280,000 barrels of flour.

The *Minnesota's* displacement is 14,000 tons greater than that of the famous *Great Eastern*,

16,000 tons greater than that of the *Kaiser Wilhelm der Grosse*, and 12,000 tons greater than that of Germany's great vessel, now completing her first round trip, *Kaiser Wilhelm II.*; but its net dead-weight cargo capacity is not far from double that of either of the three vessels named. The greater depth of the *Minnesota*, and the economy of its internal arrangement for the accommodation of cargo, in both of which particulars it has no parallel, make it by far the greatest cargo-carrier designed or built for ocean transportation.

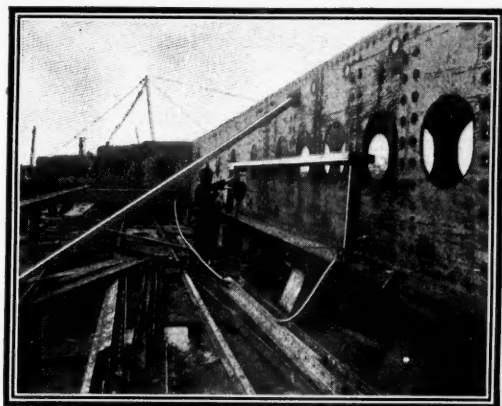
The *Minnesota* and *Dakota*, in order to withstand the stress of long sea voyages with such enormous cargoes, are necessarily constructed with great power and endurance. They are the heaviest vessels ever built under the survey of the British Lloyds. The frames and plating are about one-half heavier than those of other great vessels in their class, and approximately double the weight and thickness of the steel structure of the largest American battleship. Five continuous steel decks extend the entire length of the hulls. There is a double bottom of solid plate, and the frames and beams are spaced 30 inches apart amidships and 27 inches at the ends. Through the sheer strake, there is a maximum thickness of solid metal reaching 5.1 inches, with five-ply riveting of inch plates. Through the keel, the thickness is 4 inches, with three-ply riveting, and at the garboard lap the thickness is over four inches, with five-ply riveting. The steel plates vary in thickness from one to two inches. The rivets, of which there are 2,500,000 in each vessel, are pneumatically driven, and exceed in number those of the

Cedric by 500,000, and of the *Oceanic* by 750,000. Where the two latter vessels use an eight-inch post, the *Minnesota* and *Dakota* employ a twelve-inch post. Where the *Minnesota* and *Dakota* employ a twelve-inch frame, and a one to two inch steel plate, the battleship *Oregon* uses a six-inch frame and a half-inch plate in the deck and hull. There are, all told, 12,000 tons of steel plates and shapes in the hull and decks of the *Minnesota*, which is about one-third greater than the total tonnage of structural iron and steel in such buildings as the Park Row and the Waldorf-Astoria.

Primarily designed as cargo-carriers, the *Minnesota* and *Dakota* have the most modern accommodations for passengers, and in some respects the finest passenger equipment in the world. They have accommodations for 175 first-cabin passengers, 110 second-cabin, 70 third-cabin, and 2,400 steerage passengers or troops, making a total of 2,755 berths, in addition to berths for a staff of 48 officers and a crew of 230 men. Every room for first, second, and third-class passengers is located above the weather deck, in deck-houses, as near amidships as possible. Each room is fitted with a large window, with ventilator top, and all are outside rooms. Every room opens from a side passage which supplies light and air, and all berths are placed fore and aft. Dining-saloons, library, ladies' boudoir, smoking-rooms, barber shops, and commodiously furnished halls meet the latest modern requirements. The sanitary system equals the best shore installations. Fresh and sea water, hot or cold, is delivered to all parts of the ship. Porcelain lavatories are used throughout. All the



VIEW OF KEEL-BLOCKS OF THE "MINNESOTA" AND "DAKOTA," LAID IN 1901.



PUNCHING HOLES THROUGH STEEL BY COMPRESSED AIR.

living spaces are ventilated, artificially as well as naturally, the air being cleansed, in summer cooled, and in winter tempered, before it is delivered to the room. By the use of electric heaters, arranged with a switch, a passenger who needs a temperature of 75° F. may occupy a room adjoining that of another who wants only 60° F. Both vessels are equipped with a well-arranged electrically operated steam laundry, the finest plant of the kind on any merchant vessel.

The electric plant is the finest and largest ever placed on board an ocean vessel. All of the auxiliary machinery and appliances outside of the machinery space, except the windlass, are electrically operated. The dynamos have a normal output of 4,000 amperes. There is a total of 1,566 horse-powers represented in the motors of each ship. The ventilating apparatus, the refrigerating-machines, the steering-gear, the warping-capstans, the winches for handling cargo, the heating and the lighting, are all electrically operated. A central station on the upper deck over the dynamo-room distributes by main feeders the electric current to the entire vessel. Seven power circuits, with two heating and eleven lighting, lead from the central station to auxiliary switchboards. The net weight of the dynamos and connected engines is over one hundred and eighty thousand pounds per ship. There are more miles of electric wiring on the *Minnesota* than upon any other vessel yet designed. For the handling of cargo, there are two winches and two booms at each hatch, thirty-four steel booms in all, some of them fitted to lift weights of from thirty to fifty tons. The thirty-four winches for handling cargo are all electrically operated. The vessels are fitted with an electric whistle control, electric cooking apparatus, telephone system, and electric opera-

tion of dumb-waiters and elevators, of call-bells and alarm-signals.

The refrigerating plant and cold-storage room for cargo are notably interesting. There is one hold, completely insulated, devoted to carrying frozen meat, with a capacity of two thousand five hundred tons. Separate compartments are provided for butter, milk, fish, eggs, flour, vegetables, wines, silks, and bonded goods. An ice-making tank supplies cool water to drinking fountains throughout the ship. Two thirty-ton ammonia compressors, located in a house on deck, are driven by a seventy-five-horse-power electric motor. The cooling power of each compressor is equal to the melting of thirty tons of ice in twenty-four hours.

The *Minnesota* and *Dakota* are the first ocean-going American steamships to be fitted with water-tube boilers. Four of the sixteen boilers in each vessel are to be provided with automatic stokers and screw ash-conveyors, the first installation of mechanical stokers on an ocean-going cargo and passenger vessel. The coal bunkers have a capacity for 6,000 tons, sufficient to amply provide the great carrier for long journeys,—if necessary, for an 8,000-mile voyage. The normal speed is 14 knots, with an average of probably 12 knots under a heavy cargo in bad weather.

The anchors weigh 8½ tons, and the cable over eighty-five tons. The great steel rudder weighs 40 tons, and the twin screws have a diameter of 20 feet. There are 23 cargo hatches, and 20 side cargo ports for receiving and dispatching freight, which is handled by 40 cargo derricks. Above the five continuous decks, three upper decks rise to a height, at the captain's bridge, of eighty-eight feet above the keel.

Were the *Minnesota* to be placed on Broadway, she would extend down street nearly three blocks and fill the entire street up to the windows of the buildings on either side to the height of the average seven-story building. Her cargo capacity is more than double that of the largest recent cargo and passenger vessels constructed in American yards, like the *Kroonland* and *Finland*, built at the Cramp shipyards, or the *Korea* and *Siberia*, constructed at Newport News. The *Minnesota* has not far from double the tonnage of the new modern creations, the *Minnekakda* and the *Minnedora*, the product of the New York shipyards. It has six times the cargo capacity of any vessel now on the Pacific coast. With a cargo equal to that of one hundred railway-train loads of twenty-five cars each, or of a single train seven miles long, it is plainly seen that two such giant carriers, possessing an aggregate cargo capacity equal to that of a fleet

of a dozen ordinary vessels, will bring to the commerce of Puget Sound with the Orient progress at rapid bounds.

THE SHORT-CUT TO THE ORIENT.

The question here arises—What are the traffic conditions which warrant the construction of vessels of such prodigious capacity and calling for such an enormous volume of freight business? Why should these vessels be built for Puget Sound, which heretofore has held a subordinate position as compared with the port of San Francisco?

In the first place, Puget Sound is the logical gateway of the United States to the Pacific Orient, by reason of the fact of its geographical position. The short-cut from the United States to the Orient, as one will see when he consults his globe, is northerly by way of the Aleutian Islands. The average map presents the coasts of North America and of Asia as if they faced each other and were almost parallel, whereas the spherical contour of the globe in fact makes the Asiatic shore line almost a continuation or projection of the American shore line to the other side of the globe. Thus, the most direct route from either San Francisco or San Diego, Cal., to Japan or China, instead of being westerly by way of the Sandwich Islands, is northerly past Puget Sound and the Bering Sea. It is 1,250 miles farther from San Francisco westerly *via*

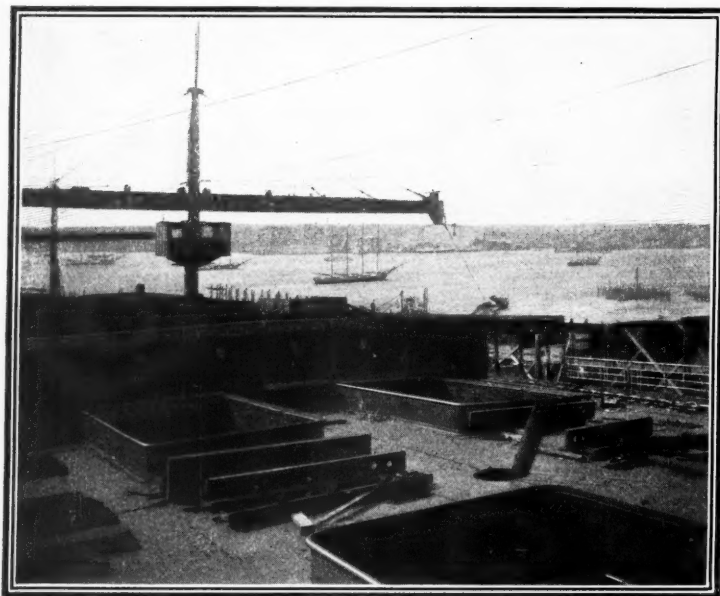
Hawaii to Yokohama, Shanghai, or Hongkong than from Puget Sound northerly to the same destinations. In other words, the San Francisco round trip to the Orient *via* Hawaii is 2,500 miles longer than the Puget Sound round trip *via* Bering Sea, which is equivalent to a week's voyage for a fifteen-knot vessel and nearly nine days for a twelve-knot vessel. This advantage of a week to ten days in the length of the voyage is the logical basis for the faith in Puget Sound as the gateway of Oriental commerce.

In the second place, the Puget Sound route for American commerce with the Orient is about one-half the length of the New York route *via* the Suez Canal. From New York to Hongkong, through the Suez Canal, the haul is 11,575 miles, as compared with 5,830 miles from Seattle to Hongkong. From New York *via* the Suez Canal to Yokohama, the distance is over thirteen hundred miles, as compared with 4,240 miles from Puget Sound to Yokohama. Why should the United States circumnavigate the globe to reach the Orient by way of Europe when it has a short-cut of its own with one-half the length of haul?

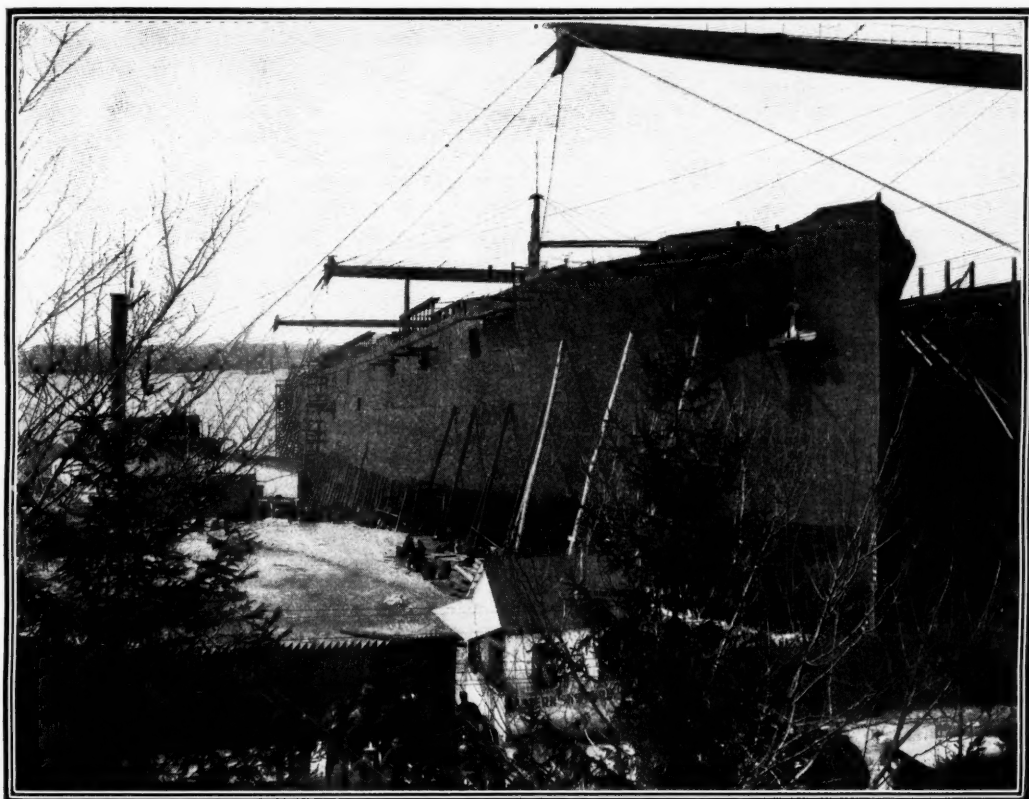
Another definite and convincing advantage which American commerce will enjoy in taking the direct trade channel from Puget Sound to the Orient is the avoidance of the two dollars per ton charge levied upon it by the Suez Canal. In view of the facts that within the past year

steel rails have been carried from the Mississippi Valley to Yokohama, and that within the past sixty days flour has been transported from Minneapolis to Manila and Hongkong, in each case at the low rate of eight dollars per ton, it is patent even to the layman that the two dollars per ton handicap *via* the Suez Canal is sufficient in itself to transfer future American commerce to Puget Sound.

Recent developments in pushing Oriental traffic have given marked fulfillment of the prediction that Puget Sound is our natural commercial doorway to the Orient. In two years, the export volume of that port has nearly doubled, and since 1895 it has multiplied sixfold. Indeed, Puget Sound and Willamette, the



A VIEW ACROSS THE DECKS OF THE "MINNESOTA" AND THE "DAKOTA," SHOWING STEEL CONSTRUCTION.



THE "MINNESOTA" BEFORE LAUNCHING.

two northern ports, have overtaken and passed the two California ports, San Francisco and San Diego. For the calendar year ending December 31, 1902, the exports from Puget Sound and Willamette were \$46,381,250, and those of San Francisco and San Diego were \$38,047,625. In steamship tonnage, Puget Sound has risen to the position of leading port on the Pacific Ocean. The steam tonnage for the month of February at Puget Sound was 52,409 entered and 68,909 cleared, as compared with 47,443 entered and 57,731 cleared at San Francisco.

Another interesting phase of our Pacific shipping is this, that whereas only 8 per cent. of the steam tonnage entering Atlantic ports in the foreign trade consists of American vessels, over 50 per cent. of the vessel tonnage carrying foreign trade at Pacific ports is American, while at Puget Sound over 75 per cent. of the steam tonnage entering for the foreign trade consists of American ships. Reversing the proposition, 92 per cent. of our foreign commerce at Atlantic ports is carried in foreign bottoms, as compared

with 50 per cent. at Pacific ports, and less than 25 per cent. at Puget Sound. When the *Minnesota* and *Dakota* arrive at Seattle to engage in commerce with the Orient, the United States will see upward of 90 per cent. of its Oriental traffic from that harbor carried in American steamships. It will probably take from now until January 1, 1904, to finish the upper decks of the *Minnesota*, put her machinery in place, and complete her furnishing and equipment for the voyage around the Horn, and the twin-sister giants may require until about April 1, 1904, to deliver their first freight and passengers at Pacific ports and enter upon their Puget Sound mission.

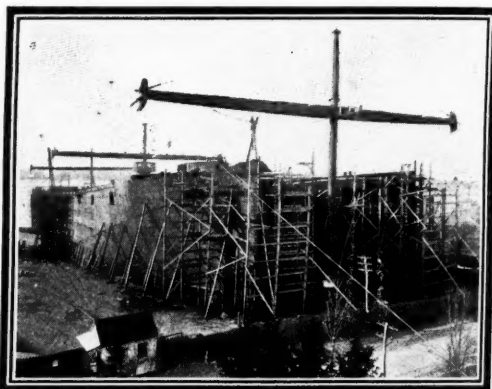
THE NEW LONDON SHIPYARDS.

The launching of the big ship at New London, Conn., naturally calls attention to the great shipbuilding enterprise which carried this vessel to completion. The foundation of a great merchant marine is a great shipbuilding industry. It speaks volumes for American enterprise and

genius in the building of ships that a company which had no existence on January 1, 1900, and not even a site for its plant on March 1, 1900, should be able within the brief period of three years to turn out the greatest cargo-carriers in the world. The shipyards at New London form one of the eight plants of the United States Shipbuilding Company. The New London branch of the general corporation is known as the Eastern Shipbuilding Company, Charles R. Hanscom president and manager. The United States Shipbuilding Company, of which Lewis Nixon is president, is the owner of two plants at Bath, Maine, two at Elizabethport, N. J., and one each at Wilmington, Del., South Bethlehem, Pa., and San Francisco, Cal., in addition to the youngest plant of all, that at New London, which has turned out the two greatest vessels designed and built in America. Five of these plants are shipyards, two are builders of marine machinery, and the eighth is one of the greatest forge, armor, and gun plants in the world. The constituent plants cover three hundred and seventy-five acres and employ seventeen thousand men. At New London alone, during the past sixty days, there have been employed upward of one thousand six hundred men, with a weekly pay-roll of about eighteen thousand dollars. The total volume of contracts in hand to be filled by the United States Shipbuilding Company at its various plants aggregates not less than fifty million dollars. At Wilmington, ten vessels are now under construction. At Elizabethport, the company is constructing a monitor, a cruiser, and two torpedo boats for the United States navy, and two troop ships and cruisers for Mexico. At Bath, there is being constructed a cruiser and first-class battleship, the *Georgia*; while at the Union Iron Works, in San Francisco, where the *Oregon* and the *Olympia* were built, there are being constructed the battleship *Ohio*, the armored cruisers *California*, *South Dakota*, and *Milwaukee*, the protected cruiser *Tacoma*, and the submarine torpedo boats *Pike* and *Grampus*. The combined displacement of the vessels under construction at the five shipyards of the United States Shipbuilding Company is over one hundred and seventy-five thousand tons.

If one of the finest harbors in the world, if a granite foundation for the laying of a ship's keel,

and if two and one-half centuries of patriotic and seagoing traditions, backed up with the capital of a fifty-million-dollar corporation, can produce a great shipbuilding center, certainly New London has a promising future. When James J. Hill and Charles R. Hanscom, on March 7, 1900, steamed up the mouth of the Thames River in the yacht *Wacouta* and landed on the rock-bound beach of Groton, just across the river from the New London docks, they recognized at once that the harbor and the site were ideal for the construction and launching of mammoth steamships. Within sixty days, a site was purchased and the Eastern



THE "MINNESOTA" AND THE "DAKOTA" IN COURSE OF CONSTRUCTION.

Shipbuilding Company organized and the plant started.

On January 15, 1901, the keels of the *Minnesota* and *Dakota* were laid, and on April 18 following, the first rivets were driven into the shell. The great trolley system which hoists the steel plates and shapes into position was established and in full working order on September 28, 1901, from which point work on the big ships proceeded at full blast. The increase in New London's population from 17,000 in 1900 to an estimate of over twenty-five thousand at the present time is one of the results of the development of what promises to be one of the greatest shipbuilding plants in the world.



THE GERMAN MUNICIPAL EXPOSITION.

BY GEORGE E. HOOKER.

SIX years ago, while preparations were going on for the Paris fair, a body of German burgomasters met at Carlsruhe to consider the proposal for a joint municipal exposition at that fair by German cities. The project was discarded, each city being left to its own course respecting Paris; but instead, the suggestion that a municipal exposition in and for Germany be held in 1903 was heartily approved. Active preparations to that end were soon under way; Dresden, whose burgomaster had made the original suggestion, was chosen as the place, and the exposition is to occur in that city from May 20 to September 30 of the present year.

WHAT GERMAN CITIES HAVE TO SHOW.

It promises to be an event of genuine interest and importance. It will, in the first place, be unique in conception. Municipal exhibits constituted something of a feature at Paris in 1900, as they had to a less extent in previous world's fairs. The forthcoming exposition, however, will be the first to be devoted exclusively to the subject of municipal development. In the second place, it will be widely representative of municipal enterprise in the German Empire. Out of the 156 cities in that empire having a population of 25,000 or more in 1895, 128 are to participate, and their preparations have been progressing with deliberation and wholesome emulation. In the third place, recent municipal history in Germany is peculiarly worthy of being thus displayed. The rapid growth of the cities of that country has been not less remarkable than that of American towns, and the efforts made, not only for superior administration in general, but especially toward comprehensive direction of that growth, form one of the notable facts of recent social history. Indeed, the great widening of municipal action in the cities of the Fatherland respecting education, recreation, charity, hygiene, and "municipal trading" is less significant than the attempt to give proper shape, both for economic and æsthetic ends, to the entire physical organization of those cities. The authorities have set up the ideal of a city which, in arrangement and structure, should be a rational unity; and while the results achieved have naturally been limited, they are in many respects surprising.

Hamburg, for example, could displace thirty

thousand people in order to obtain a proper location for new docks. Nuremberg, while developing into a modern industrial town, has studiously perpetuated its delightful architectural spirit, and any German city which should to-day lay out, or permit to be laid out, a new quarter on the easy and wearisome checkerboard plan would be laughed at. There have actually developed in Germany—and in Austria, too—especially during the last dozen years, the rudiments of a real science of city-building, with a limited but distinctive literature of its own. How far the forthcoming exposition will reveal the spirit and aims of this development, and how far it will be merely a display of method, device, and technique, cannot readily be foretold. It certainly ought, however, to disclose the existence in German municipalities,—despite their poverty in comparison with many Anglo-Saxon centers,—of a boldly idealistic attitude toward the notion of urban organization. It ought to show the existence of deliberate procedure, not only to enhance the conditions of health, to multiply modern conveniences, and to increase business expansion, but to create cities which shall be interesting in themselves,—cities which shall be restful in their lines and educative in their general suggestions to the mind, and cities, finally, which shall exemplify the idea of orderly unity. It should make it evident that a philosophy of city-making is actually assuming shape in municipal circles among the Teutons.

MUNICIPAL INSTITUTIONS.

The management of the exposition rests with a joint commission representing thirty of the participating towns, and the cost is borne in part by the latter according to population and in part by Dresden. There has been ample time for all preparations, and these appear to have been carried out with characteristic German thoroughness. In its internal organization, the display will fall under two main divisions. The first is intended to disclose "the condition of municipal life in Germany at the beginning of the twentieth century and its development in recent years." The second will "bring together a collection of appliances and manufactures produced by German firms for municipal purposes."

The first division will be supplied by city authorities, and will occupy 12,000 square meters



A VIEW OF DRESDEN FROM THE EAST IN 1896.

of space. Its eight general departments will comprise—(1) Public Streets and Places, including street-construction, mains, lighting, tramways, bridges, harbors; (2) Town Expansion, including housing; (3) Public Art; (4) Public Health and Safety; (5) Education; (6) Charities; (7) Public Finance, including "municipal trading," and (8) Municipal Statistics, including methods of regulating public employment. Models will constitute a favorite and effective method of display. Berlin, for example, has appropriated \$17,000 for models alone, and will exhibit by this means several of its public baths, its new overhead and underground electric railway, its abattoirs, its most approved school-houses, including a manual-training school, and one of its school gymnasiums. Hamburg will send a model of its great harbor and docks, with their general mechanical equipment. Nuremberg will show models of a new hospital, a school bath, and a new municipal theater. Cologne will exhibit in the same way a people's park, and Breslau a school garden. Other towns will show in like manner a school kitchen, dwelling-houses surviving from the Middle Ages, working-class houses of to-day, and types of *crèches* and the

latest schools for the blind. Full-sized sections of streets will be built, showing different sorts of paving, with sub-pavement constructions. A short street-railway line will illustrate progress to date in surface-transit methods, and an automobile train is contemplated.

RELIEF MAPS OF CITIES.

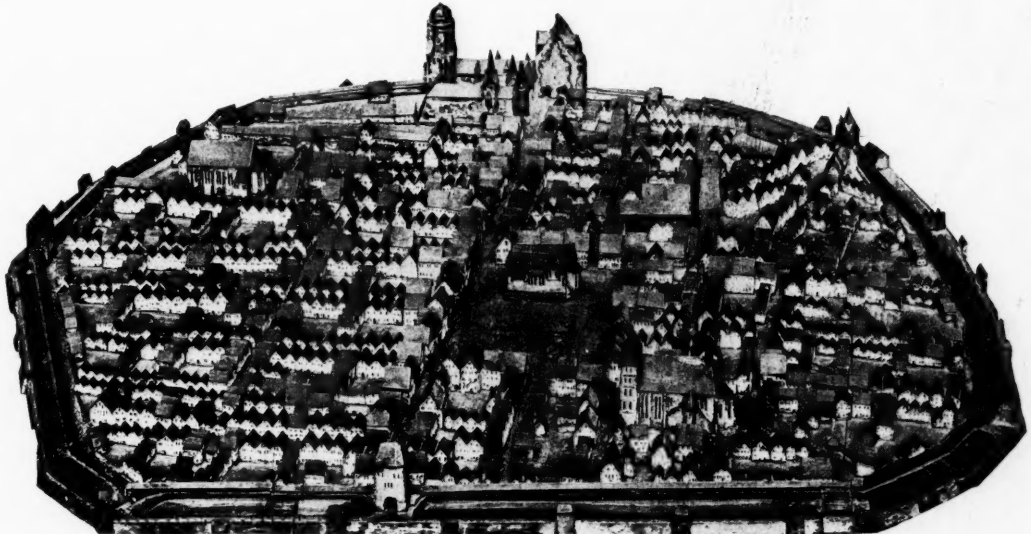
As bearing more particularly upon the principles of laying out towns and supervising building development, Stuttgart will present a large relief map of its entire area showing, among other things, the adaptation of street lines and railways to its irregular topography. Bautzen will show two such maps, one of the old city and the other of the city as now projected. The admirably organized industrial and art town of Düsseldorf will furnish plans illustrating its historical changes in form and area. Dresden will present in miniature "König Johann Strasse" before and after its reconstruction. The town of Hildesheim will set forth its procedure in conserving its charming Middle Age aspect. Fountains, squares, and other decorative elements will be liberally reproduced in model and picture, and in the further interest of beauty as well as

economy, there will be a special exhibit of smoke-consuming devices.

EDUCATIONAL VALUE OF THE EXPOSITION.

The second main division will be supplied by private firms, and will occupy 8,000 square meters of space. It promises to contain a great

characterizes our generation, such a specialized exhibit may seem of slight moment to a distant country. It is doubtful, however, if any other foreign display ever challenged attention more justly from this country. No other leading country is so much in need as our own of the educational influence of such an exposition. In



BIRD'S-EYE VIEW OF NEW DRESDEN IN 1521. AFTER A WOOD MODEL.

variety of practical appliances, varying from an automatic coal-feeding apparatus for steam-boilers to an electrical adding-machine.

The exposition will be held principally in a permanent building erected five years ago for such purposes, and will also include various popular and purely recreative features.

While only German cities and firms will exhibit, formal invitations have been issued to numerous European cities, and to New York, Philadelphia, Chicago, Washington, St. Louis, Milwaukee, and San Francisco, to be represented at the opening ceremonies. Not only should these invitations be appropriately recognized, but American towns should make the most of this important educational event. In comparison with the procession of world's fairs which

no other is the municipal problem so backward or so acute. In no other has the comparative study of municipal activity in general been so much neglected. We are thus challenged to a more enterprising line of practice. Private business firms would never ignore analogous expositions in their special lines, and cities are today the greatest of all business organizations.

It would be an excellent move if the cities above mentioned,—to say nothing of others,—could send representatives to this exposition who would bring back discriminating reports for city councils and the general public upon its most valuable features. American mayors, or, in case of their default, city councilors, may well bring this subject up for consideration at once.



THE RIGHT HON. GEORGE WYNDHAM, M.P., CHAMPION OF THE IRISH LAND BILL.

BY W. T. STEAD.

IN 1889, when he was twenty-six years old, Mr. George Wyndham entered Parliament, being elected as Conservative member for Dover, a seat which he has held ever since, and which he seems likely to hold for the rest of his natural life. His first notable speech was a reply to Sir W. Harcourt's criticisms of Mr. Balfour's land bill of 1890. It is a curious coincidence that after the lapse of thirteen years Mr. Wyndham's great opportunity has come in the production of an Irish land bill, and that now, as then, his most formidable antagonist is the burly and aged Knight of Malwood.

He spoke with a certain distinction, but he did not at first catch the ear of the House. His gestures were a trifle too much for the nerves of his hearers. He had to learn restraint, to discipline himself, and to acquire the mastery of the House of Commons manner. He was too much of a fine young gentleman. His enemies sneered at him as a lightweight, a mere *dilettante*, who had better stick to his books and leave politics alone. But those who had worked with him did not think so. He was appointed financial secretary to the war office, and so began his connection with the department which in the dark year of 1900 he was destined to represent in the House of Commons. He had an instinct for figures—which made him sometimes dream of being one day chancellor of the exchequer—and habits of industrious application which enabled him to master with compara-

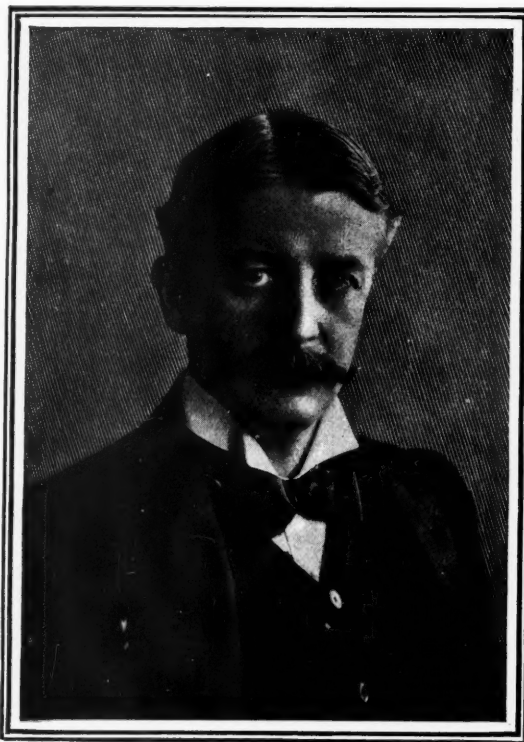
tive ease the intricate details of our military administration.

In 1892, the Unionist administration having gone stale, it was turned out, much to the satisfaction of Mr. Wyndham and his chief, who were weary of office and longed for the invigorating leisure of opposition. It was in the next three years that Mr. Wyndham came under the spell of Mr. Rhodes. He went to South Africa,

and in his long rides with Mr. Rhodes over the veldt he learned something of the secret of the great African genius. He loved him as a man and he revered him as a leader, and when he returned to England, while some said that he was under the Rhodesian spell, Mr. Wyndham knew that he had found his soul.

Like the rest of us, Mr. Wyndham deplored the Jameson raid; but not even the raid could blot out from his heart the memory of the kindling inspiration which he had gained from Mr. Rhodes. When the South African Committee was appointed nominally to investigate, but really to hush up, the complicity of Mr. Chamberlain in the conspiracy which had

resulted so disastrously, Mr. Wyndham was appointed as the informal representative of the Chartered Company. He was the only member of that historical committee who did not miserably disappoint expectations. Like the rest of his colleagues, he earned the encomium pronounced by Lord George Hamilton for refraining from pushing the inquiry the



THE RIGHT HON. GEORGE WYNDHAM.

moment it threatened to compromise the good name of the government, but, unlike the rest of them, he refused to set his name to the series of falsehoods which they dignified by the name of a report. He did not, it is true, refuse to whitewash Mr. Chamberlain, but he refused to complete the infamy of that operation by blackening the character of Mr. Rhodes.

The return of the Unionists to power did not lead at once to his appointment to office. He devoted his attention to journalism and to letters. He was one of Mr. Henley's young men; he edited North's "Plutarch;" he edited a volume of Shakespeare's poems; he wrote articles which were printed and poems which have not yet been exposed to the ordeal of publicity. He took an active part in organizing the campaign in the press in favor of the Outlanders of Johannesburg, which in a few years was destined to culminate in a campaign of another sort. He had married the Countess Grosvenor, widow of the heir to the Dukedom of Westminster, and he took a delight in superintending the early studies of her only son.

He remained a private member till October, 1898, when, on the promotion of Mr. Brodrick from the war office to the foreign office, Mr. Wyndham became under secretary for war and took his seat on the Front Bench. His chief, Lord Lansdowne, was in the Lords, and Mr. Wyndham was the spokesman and official representative of the army in the House of Commons. Thus ended his period of probation.

AT THE WAR OFFICE.

Mr. Wyndham entered the war office when the reputation of the British army stood higher than it had done for many years. Lord Kitchener had just completed the reconquest of the Sudan. A campaign against innumerable difficulties had just been carried to a triumphant close. Khartum had been captured, and as a natural sequel the attempt of the French to bar the Cape to Cairo road by the occupation of Fashoda had been summarily and imperiously foiled. That within two short years the British arms would be covered with unspeakable humiliation, and that it would be necessary to array four hundred thousand British troops in South Africa in order to crush the resistance of seventy thousand Boers, was happily hidden from the eyes of the young minister when with a blithe heart he first took his seat on the Front Ministerial Bench in the House of Commons. The most censorious critic cannot lay upon his shoulders any of the responsibility for the series of misfortunes that culminated in the catastrophe of the Black Week of December, 1899.

Mr. Wyndham began his experience of war before he attained manhood, before smokeless powder and long-range rifles transformed the art of war. He quitted the war office when the lessons of a score of stricken fields in South Africa taught the world that the old-time war, which had lasted from the discovery of gunpowder until our day, was a thing of the past. But although the fashion of war changes, war itself, he has told us, will go on forever. "The conditions of the age-long contention have changed, and will change, but it certainly is coeval with progress; so long as there are things worth fighting for, fighting will last." But war as Mr. Wyndham saw it in 1885 has vanished like the Wars of the Roses.

Mr. Wyndham was quick to realize the change even before it had been made manifest to all the world by the campaigns in South Africa. Almost immediately after his accession to office, he made a speech on the subject, in which he said:

In my opinion, and that of some of our most expert soldiers, these developments in the weapons of war tend rather to a diminution of the sacrifice of life in war. They make the occasion of pitched battles much rarer. If you can force a pitched battle at a distance of eight miles, it leads to more maneuvering, and war becomes more scientific, more like a game of chess, than formerly, and with adequate arrangements and perfect mobility of transport, I feel sure that we shall see the time when a great general will be able to compel his opponents to surrender without a blow being struck rather than accept terms of battle which even a lunatic would not take.

The truth of this passage was much questioned then; but two years had not passed before the surrender of thousands of British troops, almost without firing a shot, from Nicholson's Nek onward, proved how truly the young under secretary had divined the possibilities of warfare under the new conditions.

Mr. Wyndham's work as under secretary was marked by no special display of genius before the war broke out in South Africa. He answered questions pleasantly, he explained the estimates lucidly, and defended the war office gallantly. He acquired more of the style and manner of an official. He kept his gestures under control, he no longer got upon the nerves of the House. It was evident he knew the business of his department, he made no bad mistakes, he was courteous to all men,* and grew daily in the favor and the respect of the House of Commons.

It was not, however, till after the war broke out and the prestige of the army had been shattered by an almost uninterrupted series of defeats in South Africa, that Mr. Wyndham's first great opportunity came. When he rose in Feb-

ruary, 1900, in the debate on the address, he had to confront a House smarting with bitter humiliation, angry with five months' almost uninterrupted reverses, and eager to find a scapegoat in the war office. He had indeed a formidable task. The nation was beginning to fathom the depth of official ineptitude, and to appreciate the magnitude of the perils which encompassed the empire. The air was thick with cries of anger, with clamorous alarms, and with confused counsels. The situation was such that it might well have daunted an experienced veteran. Mr. Wyndham met it with such lofty courage, such calm composure, such resolution and perspicacity, as to amaze his friends and confound his enemies. Never had he appeared to such advantage. His speech saved the parliamentary situation.

It is true that it did not save the military situation. No speechmaking could do that. But it convinced the House that the war office must not be made the scapegoat,—at least, not just then. He had a bad case, no doubt. He had to defend a system which had been proved to be indefensible, and to make the best of the makeshift policy of meeting emergency by expediency. He could do nothing else. He was not the chief of his department. He was not even a member of the cabinet. What was given him to do was to make the best of a bad case,—how bad even its worst critics but dimly perceived at the time. And he did his best with a whole heart, and did it in such fashion as to disarm opposition and tide his colleagues over a most perilous crisis. From that time, Mr. Wyndham was recognized as one of the most promising of the future rulers of the empire.

His health broke down, and he returned from a sick-bed in March to move the army estimates. The work which the war threw upon the under secretary was enormous. But there is great resilience in his constitution, and he stuck to his post like a man until after the fall of Pretoria. Then, when the war was believed to be approaching its end, Mr. Wyndham was rewarded by being transferred from the under secretaryship of war to the chief secretaryship of Ireland, with a seat in the cabinet.

CHIEF SECRETARY FOR IRELAND.

When Mr. Wyndham found himself once again at Dublin Castle, he felt that he was returning to his first love. Mr. Wyndham possesses one excellent qualification for the task of conciliating the Irish. He is descended, on the female side, in direct line of descent from one of the most famous of the martyrs who sacrificed their lives in the cause of Irish independence. Lord

Edward Fitzgerald, who died in prison from wounds received in resisting capture, was the great-grandfather of the present chief secretary. Pamela, Lord Edward's daughter, was a kind of glorified Maud Gonne of her day, who made her house at Hamburg the rallying-place of exiled patriots. She married the first Lord Leconfield, whose daughter is Mr. Wyndham's mother. Besides this Irish blood, there is a French strain in his blood, which still further sets him apart from the "snub-nosed Saxons" in whose name he is governing Ireland.

On his appointment as chief secretary, he found the country stirring with the throes of a great national revival. Government and people alike, although in very widely different channels, were awaking to a sense of the immense possibilities of the salvation which they had hitherto neglected. Mr. Horace Plunkett and the Agricultural Department had begun to discover that the genius of the Celtic race disposed the Irish to take kindly to that coöperative organization of agriculture which is alien to the stubborn individualism of the English farmer. And side by side with this, outdoing the official world in its zeal, was the great Celtic revival among the people—one of the most remarkable, unexpected, and promising of all the national movements of our time.

On his administration in Ireland, there is not much need to dwell. He began with a bad little blunder in seizing a paper which had thrown mud at "Ned Rex," as the profane Irish-Americans call His Gracious Majesty Edward VII., and he did not exactly endear himself to the Irish by his treatment of Sheridan, or by his revival of the Crimes Act for the purpose of giving a few representatives of a crimeless land the privilege of a sojourn in prison. On the other hand, he introduced an abortive but well-meant land bill, and appointed a first-class under secretary in the person of Sir Antony McDonnell. There is no need to dwell upon these details of an administration which will be judged, not by what it did in 1901-02, but by what it is trying to do in 1903-04.

Mr. Wyndham has frequently defined the principles of his Irish policy. They begin by a sonorous affirmation of the Unionist shibboleth in terms which, while seemingly uncompromising, might be accepted by every Home Ruler in the land:

These two islands, by the inflexible ordinances of geography, of history, of finance, are bound, and must ever be bound, together by ties even closer than those which bind our colonies to the mother country.

"Even closer" is an elastic phrase, but if they are to be of the same kind of ties, then

Mr. Wyndham's definition is equivalent to the formula of colonial home rule, with a difference to which no Gladstonian would take exception.

Mr. Wyndham has thus defined the two great objects of Unionist government in Ireland in terms to which Mr. Gladstone would have taken little exception, save in the order in which they are stated. Mr. Wyndham said :

The first of these objects is the suppression of agrarian crime, of intimidation, and the protection of liberty. That is a matter of immediate, of urgent, of constant obligation.

Mr. Gladstone would have put the protection and development of liberty first. But that is a detail, for in no way can agrarian crime be so effectively suppressed as by the removal of its causes, as Mr. Wyndham has at last discovered. There is no difference between the Gladstonian and Mr. Wyndham as to his second avowed object, the enlarging of the opportunities for the Irish people. The improvement of means of communication, of industrial processes, of fisheries ; the opening up of the west coast, with its sea fisheries, now crippled by the lack of safe harbors and transit facilities ; the encouragement of thrift, economic organization, and self-help by the establishment of agricultural banks and coöperative societies. All these are as much the objects of the Nationalists as of Mr. Wyndham's Unionists.

The essential point is that Mr. Wyndham is now baptized with the spirit of the Irish revival. He believes in Ireland. He loves the Irish people. To his quick and sympathetic nature, the witty and mercurial Celt is much more sympathetic than the more stodgy Englishman. Ireland, like the fair damsel in Spenser's poem, has a singular fascination for the Sir Calidores and Sir Artegalds who stray within range of the magic of her charms. Mr. Arthur Balfour has never cared, and does not now care, for anything so much as for Ireland and the Irish. And as it was with the master so it is with his secretary. The new land bill is but the first of the great measures of reconstruction and reconciliation by which the great-grandson of Sir E. Fitzgerald hopes to realize, and more than realize, the generous aspirations of his ancestor. After the land question comes education, and after that, again, the vital question of the industrial revolution which will make Ireland the great *entrepôt* of the world's commerce. Mr. Bourke Cockran sees in the splendid harbors of the west coast and the ever-increasing size of Atlantic ferry-boats a combination pointing irresistibly to the conclusion that Ireland will succeed England, as Carthage succeeded Tyre, in the leadership of

the world's markets. Mr. Wyndham largely shares Mr. Cochrane's belief, and is already scheming to prepare for the advent of the new day when Ireland will be the landing-stage and central clearing house of the commerce of the Old World and the New, the prosperous and flourishing middleman between Uncle Sam and John Bull.

Mr. Wyndham's speech in explaining the provisions of the new land bill was lucid, interesting, and worthy the occasion and the theme. Never before has an Irish land bill,—and there have been forty-two,—been hailed with such a chorus of approval. Whether the same good fortune will attend it in its future stages remains to be seen. But for the moment, all appears serene.

The question of questions as to the immediate future is whether, if the land bill passes, Mr. Wyndham will have the courage to go forward and add a further extension of local self-government to the other schemes which he is incubating for the benefit of Ireland. That something will have to be done, nobody knows better than Mr. Wyndham himself. We have governed Ireland in the past by the landlord garrison. The antagonistic interests of the two classes enabled us to act on the classic maxim, "*Divide et impera*." The aim of his bill is to terminate that division. If it succeeds, we shall be confronted, for the first time in the history of Ireland, by a united nation. The younger occupants of the old castles and country-houses in Ireland will take their natural position as leaders of the people, with whom their interests will be identical. In vain shall we try to keep the new wine of united and revived Nationalism in the shrunken bottle of Castle government. Irish autonomy, in one form or another, is the necessary and inevitable corollary of the last legislative exploit of the Unionist government.

Mr. Wyndham is not yet forty years of age. With the exception of Lord Rosebery, no young man has risen so rapidly in our time to the front rank, or has such a good chance of becoming prime minister. Between the two men there are many points of contact and many points of contrast. Both are aristocrats by birth and democrats by temperament ; both have had extraordinary good luck ; both are Rhodesians ; both are men of letters ; both are persons of singular charm. But there the resemblance ends. Mr. Wyndham had the good fortune of having to bear the yoke in his youth ; Lord Rosebery was "lord of himself—that heritage of woe." Mr. Wyndham is in the House of Commons ; Lord Rosebery in the House of Lords. Mr. Wyndham has never had any municipal training ;

Lord Rosebery's chairmanship of the County Council was one of the most brilliant episodes in his distinguished career. Mr. Wyndham is passionately devoted to Ireland and the Irish; Lord Rosebery is singularly antipathetic to the Irish genius. Mr. Wyndham—but why continue the parallel? The greatest point of contrast is in their temperament. Mr. Wyndham is of a happy disposition, absorbed in his subject, forgetful of himself, genial, expansive, sympathetic, and quick to share his ideas, his aspirations, and his fears with his intimates. Lord Rosebery is morbidly self-conscious, reserved almost to the verge of secretiveness, incapable of frank and generous confidence, and, although he has many followers, how many are there who could by any stretch of language be described as his intimates? You always know where you have Mr. Wyndham; you never know where you have Lord Rosebery.

As a speaker, Mr. Wyndham is felicitous in his phrases. His description of the Liberal opposition as a "piebald party with a patchwork programme" was as happy a taunt as any coined in recent years. He is not afraid of letting himself go. He does not forswear purple pages in his oratory, and he conveys to his hearers that pleasant sense of enjoying his own speeches. Mr. Wyndham, as his speech at the Rodin banquet showed, can be as eloquent in French as in English.

He is a human creature, who is true to his friends, adored by his wife, and incapable of playing foul in politics or in anything else. When the obligations of friendship imposed upon him the duty of bearing witness for a Liberal friend, to the detriment of the pocket of a Conservative M.P., he never hesitated. Friendship, with him, is superior to party.

THE SIGNIFICANCE OF THE LOUISIANA PURCHASE.

BY PROFESSOR FREDERICK J. TURNER.

IT is just a century ago that Livingston, Monroe, and Marbois signed the treaty by which France ceded Louisiana to the United States. The actual signing occurred on May 2, but the document was antedated to April 30. This event in the history of the United States, "worthy to rank with the Declaration of Independence and the formation of the Constitution," was the resultant of three long-continued forces in American history,—the advance of the pioneers toward the West, the diplomatic struggle between France, Spain, England, and the United States for the possession of the Mississippi Valley, and the rivalry of these powers over the disintegrating empire which Spain had reared in the New World. When we consider the magnitude and sweep of the advance of American settlement, it is easy to believe that whatever nations might temporarily secure the Mississippi River, in the long run the vast interior would be under the Government of the American people. Nevertheless, this cannot be affirmed with any certainty, and several times within the period from the adoption of the Constitution to the purchase of Louisiana the Mississippi Valley narrowly escaped being the theater of conflict between the powers of Europe. Into such a conflict, the United States would have been drawn as the ally of one or

other of these powers, and thus European interests would have dominated the fortunes of the New World.

In view of the fact that at the beginning of the Union the West was more interested in opening the Mississippi River as a means of exit for its crops than in the newly made federal government, it cannot safely be said that any strong European power which might have taken possession of the Mississippi Valley could not have held it, provided that it treated the Western settlers with liberality. The contest for Louisiana was in reality a contest for the whole Mississippi Valley and for ascendancy in the Western Hemisphere.

FRANCE, SPAIN, AND THE MISSISSIPPI.

Thus, from the point of view of world politics, the forty years which elapsed between the withdrawal of France from America in 1763 and the cession of Louisiana in 1803 were fraught with momentous issues. They may briefly be stated as follows: The family compact which bound France and Spain together had been strengthened by the cession of Louisiana to Spain in 1763, a cession which partly reconciled Spain to the loss of Florida to England. When the Americans declared their independence, France allied herself with them and procured the assistance of

Spain; but it was not to aggrandize the United States,—it was rather to humiliate England and to take her place as the controlling power over the United States. Nothing was further from the desire of France than to raise this country into a dangerous rivalry with Spain for the possession of the New World, and she therefore supported the demands of Spain at the close of the Revolution. These demands would have restrained the United States to the Alleghany Mountains, except where the frontier settlers had recently established themselves in Kentucky and Tennessee. Spain desired to exercise a protectorate over all the Indians of the Gulf region, and to exclude the United States from the Mississippi. But the American commissioners broke the instructions which required them to be guided by the advice of France, and made a separate preliminary treaty with England, in which that power, as a means of reconciliation, granted our demands to a boundary on the Great Lakes, the Mississippi, the thirty-first degree, and the St. Marys River. She also gave to us the navigation of the Mississippi. Although this treaty was accepted by France, Spain repudiated the right of England to yield to us territory of which she herself was in military possession; and as the actual possessor of Florida and Louisiana, she refused to open to us the navigation of the Mississippi, believing that it was the key to her monopoly of Spanish America. Even England herself pleaded violations of the treaty on our part, and refused to evacuate the territory between the Ohio, the Great Lakes, and the Mississippi.

WESTERN SETTLEMENTS AFTER THE REVOLUTION.

Thus, at the close of the Revolution, the United States had thrust a wedge of settlement along the Ohio and its tributaries between two great Indian confederacies on the north and on the south, each of which was dominated by rival European nations, anxious to check the advance of the United States. She found herself thus threatened on each flank at a time when her own loose confederation seemed about to break asunder. She was unable to chastise the Indians, to protect the Western settlers, or to secure our claims to the navigation of the Mississippi. Such a situation was intolerable to the "men of the Western Waters." Without the freedom of that river, their corn and tobacco must rot in the fields. The great stream of American settlement that poured into Kentucky, Tennessee, and Ohio in the closing years of the Confederation grew turbulent as it found its industrial life dammed up by the Spanish closure of the Mississippi. Under the temptation of this situation,

at the close of the Confederation, England supported the Indians in their resistance to the advance of the Americans across the Ohio, and planned to promote the independence of the American settlements beyond the Alleghanies, with a view of making them her dependent allies. At the same time, she laid plans for the recovery of Florida. In the Southwest, Spain developed a similar policy. She strengthened her hold upon the Indians, intrigued with the leading settlers of Kentucky and Tennessee, with the view to inducing those communities to transfer their allegiance from the United States to Spain, and as a means of pressure, she refused the navigation of the river. The Western settlers themselves were strongly inclined to believe that their democratic agricultural society had a destiny separate from the merchants and planters on the other side of the Alleghanies.

ENGLAND'S ATTITUDE TOWARD SPAIN.

Although the establishment of the new government checked these intrigues, the French Revolution, which broke out contemporaneously with Washington's Presidency, raised an even more serious danger. One of its more important results was to end the family compact which had bound Spain and France for so many years. In 1790, England and Spain were about to go to war over the question of the seizure of some English vessels by Spain in Nootka Sound. Obviously, such a war would give to England an opportunity to supersede Spain in the control of the Mississippi, to win the support of the Western settlers by the offer of free navigation, and to organize a revolt of Spanish America. This would break the Spanish monopoly and open that immense region to her commerce. In February, 1790, William Pitt had an interview with Miranda, the celebrated Venezuelan revolutionist, who proposed that England should bring about the formation of an independent Spanish America which should include in one confederation all of South America except Brazil and Guiana, together with Central America, Mexico, Cuba, and Louisiana. England's support was expected because she would be the protector of this new nation, and Florida was apparently to be added to her possessions.

Preparations were actually made by Pitt to seize New Orleans, and an expedition from that city into Mexico was also considered. Thomas Jefferson, who had recently been appointed Secretary of State, saw clearly the danger to the future of the United States. Alarmed by the prospect of England's possession of Canada, Louisiana, and Florida, he wrote: "Embraced from the St. Croix to the St. Marys on one side

by their possessions, on the other by their fleet, we need not hesitate to say that they would soon find means to unite to them all the territory covered by the ramifications of the Mississippi." He therefore instructed our representative to point out to Spain that her best policy would be to cede Florida to us and to yield the navigation of the Mississippi, on the condition that we should guarantee her territory west of that river. Washington's cabinet was not ready to advise him to prevent England's expected expedition by arms, but their deliberations showed a keen realization of the importance to us of the possession of New Orleans. Fortunately, the question was not brought to a crisis, because France declined to recognize the family compact, and in her isolation, Spain was obliged to make terms of peace.

FRENCH DESIGNS ON LOUISIANA AND FLORIDA.

By the close of 1792, France, influenced by Miranda, had determined to enrich herself at the expense of the Spanish empire in America and to win back her own American provinces. Therefore, in the beginning of 1793, the French Government sent Genet as minister to the United States, with instructions to secure a treaty of alliance which should have among its objects the freeing of Louisiana and Florida and the conquest of Canada. If, however, the United States were not willing to make common cause with France, Genet was instructed to stir up a revolution in Louisiana and the other provinces adjoining the United States. In this, he was informed, he would probably be able to secure assistance from the frontiersmen of Kentucky. Finding Washington firm in his policy of neutrality, Genet initiated the secret and revolutionary part of his instructions. Through the consul at Charleston, he formed an army of Carolinians and Georgians designed to capture the Floridas, and he authorized the famous Gen. George Rogers Clark, of Kentucky, to form an army there which was to descend the Mississippi under the French flag and capture New Orleans. It was expected that by the spring of 1794 at least four thousand frontiersmen would strike simultaneously against the Spanish power on the Gulf of Mexico.

Fortunately for the future of the Mississippi Valley, the Reign of Terror compelled France to look to her safety at home and to leave these vast designs of revolutionizing Spanish America to one side. Acting upon the representations of the American Government, Genet was superseded, and his successor arrived barely in time to put a stop to the march of the frontiersmen. It is hardly too much to say, however, that but

for the cold neutrality of Washington, the West, under the banners of France, might have been hurried into a crusade against Spanish America that would have changed the whole current of the history of the United States.

FRANCE SCHEMES TO GET SPANISH TERRITORY.

The year 1795 marked a turning-point in the history of the struggle for the Mississippi. Jay's treaty put an end to England's influence over the Indians north of the Ohio, and freed the northern flank of the United States from the pressure of a foreign power. At the same time, Spain, realizing her weakness in the Southwest, and apprehending that Jay's treaty might mean a joint attack by England and the United States, yielded our boundaries and free navigation.

This relinquishment of Spanish claims to the eastern bank of the Mississippi was a serious menace to the plans of France. She had vainly demanded Louisiana for herself in the treaty of Basle, which closed her war with Spain in 1795. After Jay's treaty was ratified, she realized that there was but slight hope of winning the United States to the French alliance, and it became her policy to dominate the foreign affairs of Spain and to acquire large sections of American territory. In 1796, therefore, France instructed her minister to Spain to ask the relinquishment of Louisiana and the Floridas to France, as a means of protecting the rest of Spanish America. "We alone," wrote the Directors, "can trace with strong hands the bounds for the power of the United States and the limits for their territory."

In the same year, expecting a war with the United States, France sent into the interior of this country an engineer officer, General Collot, who made a careful map of the courses of the Ohio and the Mississippi, and examined the strategic conditions of the valley. So clearly did he realize the hold of the Westerners upon the river, that he desired to prepare the way for a secession of the West and the creation of a French empire with its eastern frontier along the Alleghany Mountains. He elaborated a scheme for a series of forts to command the passes of the Alleghanies, to protect the Great Valley from the attacks of the eastern part of the United States. At this time, France induced Spain to continue to hold possession of the posts on the east bank of the Mississippi River, under the expectation of a possible attack by England and the United States.

ANGLO-AMERICAN PLOT AGAINST NEW ORLEANS.

In fact, the apprehensions felt by Spain and France in this respect were not without foundation. Already plans were being laid by Senator

Blount, of Tennessee, to rally the frontier for a descent of the Mississippi River and the capture of New Orleans for Great Britain, with the hope of assistance by a naval force from that country. The plot was discovered, and Blount was expelled from his seat in the Senate; but this enterprise furnished the Spaniards with sufficient excuses for delaying the relinquishment of the promised posts, until at last, in 1798, Godoy, the prime minister, gave an order for their evacuation. France found him unwilling to play the part of a tool for her ambitious designs, and shortly after his order of evacuation, she brought about his fall.

TALLEYRAND'S PROPOSITION TO SPAIN.

In the relations between France and the United States, matters had gone from bad to worse. In 1798, France proposed to Spain that the Papal Legations, together with the Duchy of Parma, should be made a principality for the son-in-law of the King of Spain, in case Louisiana should be relinquished to France. In a memoir to the Institute, Talleyrand laid down his ideas on the subject of the acquisition of Louisiana and Florida. By such a revival of her colonial policy, he believed that Spanish America could be protected and that the French revolutionary energies would be diverted to a new channel of activity. Vast territories would be opened for the colonization of agitators and malcontents in all the parties, and France would find in Louisiana the granary for her important colonial possessions in the West Indies. Acting on these principles, Talleyrand again urged upon Spain the relinquishment of Louisiana and Florida, promising to make them "a wall of brass forever impenetrable to the combined efforts of England and America."

PROPOSED ALLIANCE OF THE UNITED STATES AND ENGLAND AGAINST FRANCE.

But England and America were now thoroughly aroused to the menace that the growing military greatness of France imposed, and under the Federal party, a closer connection was being established between the two powers. The revelations of the "X. Y. Z. correspondence," showing the insulting demands of the French Government, brought about such a heated condition of the public mind that in 1798 Congress authorized the capture of French vessels, and during 1798 and 1799 actual hostilities existed upon the sea. The aged Washington was made commander-in-chief of the army, and Hamilton was second in command.

* Apprehending that the increasing influence of France over Spain after the fall of Godoy might

result in transferring the colonial possessions of Spain to the strong French nation, William Pitt, who then guided England's policy, again took up the question of extending British influence in Spanish America. At the beginning of 1798, Miranda, keen of scent for every opportunity to advance the cause of Spanish American revolution, came to him with renewed proposals for English intervention. For the assistance of the revolting Spanish colonies, England was asked to furnish an army and a fleet; of the United States was to be requested the coöperation of five thousand backwoodsmen, familiar with new countries, and officered by veterans of the American Revolution. By February of 1798, Pitt had determined that unless Spain seemed likely to be able to save herself from a revolution and from the resultant domination of France, England would propose some such combined operation with the United States to free Spanish America. Miranda's proposition was transmitted by our minister, Mr. King, to Hamilton, who gave his approval to the undertaking, but preferred that the principal part should fall to the United States, and that we should furnish the whole land force. "In this case," he said, "the command would very naturally fall upon me."

The restless genius of Alexander Hamilton saw in the proposed expedition the chance to become the Washington of Spanish America, and to bring about a renewed intimacy between the United States and England. If Adams could be succeeded in the Presidential chair by a victorious general with the power of a great army behind him, stability of government, threatened, as he believed, by the Republicans, would be insured. Moreover, Hamilton looked forward to the creation of an American system in which the United States should have the ascendance, able to dictate the terms of the connection between the Old and the New World. Fortunately, perhaps, for the future of the United States, the Presidential chair was again occupied by a man of cool judgment. John Adams declined to take part in this undertaking, and by a new commission to France, in 1800, he procured a termination of the hostilities between us and that country.

NAPOLEON GETS BACK LOUISIANA FROM SPAIN.

There now appeared upon the scene the tremendous figure of Napoleon. Napoleon's mind worked with such momentum, his action was so decisive, that the acquisition of Louisiana, upon which he determined, moved rapidly forward. On the last day of September, 1800, he made a treaty with the United States, and on

the next day Spain retroceded Louisiana to France. Napoleon gave Spain a promise never to alienate the province, and he pressed her to and the Floridas to his empire. Peace was projected with England by the preliminary treaty of October, 1801, and this being effected, Napoleon ordered an expedition to occupy San Domingo, then the most profitable possession of France in the West Indies. Louisiana was intended to be a feeder for San Domingo; but before Louisiana could be occupied, Napoleon found it necessary to crush the revolutionary negro republic in that island under Toussaint L'Ouverture, and this engaged the attention of his army of occupation.

JEFFERSON LOOKS TO AN ENGLISH ALLIANCE.

Rumors of the transfer of Louisiana reached the United States in the early summer of 1801, but the Government did not at once take alarm. When, however, toward the close of the year, President Jefferson received an official copy of the treaty from our minister in England, and at the same time was informed by our representative at Paris that France denied that a cession had been made, he became concerned, and in the spring of 1802 he wrote to Livingston, our minister to France, that "the day that France takes possession of New Orleans fixes the sentence which is to restrain her forever within her low-water mark. It seals the union of two nations who in conjunction can maintain exclusive possession of the ocean. From that moment, we must marry ourselves to the British fleet and nation." It was his policy, however, to wait until the next war between France and England should give to the United States an opportunity to make common cause with England in order to secure our demands. What was desired by Jefferson was the cession of New Orleans, or at least West Florida, as a means of insuring free transit down the Mississippi. In the rest of the territory beyond the Mississippi, he had less immediate interest. Had Napoleon been able promptly to throw a large army of trained veterans into New Orleans, it is more than doubtful whether Jefferson would have resisted this occupation. With Napoleon's army once there, the whole future of the Mississippi Valley would have been in question.

NAPOLEON'S DREAMS OF COLONIAL EMPIRE.

But France was not able to occupy New Orleans at once. Her armies in San Domingo were swept away by war and pestilence, and the expedition that had been intended to sail for New Orleans at the end of September, 1802, was unable to depart. What the intentions of

France were with respect to Louisiana are shown in the instructions which were drawn for the general who was to command the forces of occupation. These instructions show that if France had occupied Louisiana, she would have attempted so to strengthen her forts along the river that the province could stand by itself. The Governor of Louisiana was also to maintain agents among our Western settlers, with a view of coming into relation with the prominent men, and by alliances with the Indians within our Southwestern region, he was to protect the province against the advance of the Americans. In short, these instructions lead clearly to the conviction that France was determined to take up the policy of Spain, with a view of securing the controlling power on both sides of the Mississippi. It was not simply Louisiana that Napoleon desired to rule, but the interior of the United States, and all the approaches to the Gulf of Mexico,—a great colonial empire that should replace the Spanish power, which at that very time was falling under his control.

JEFFERSON SENDS MONROE TO PURCHASE NEW ORLEANS.

The closure of the Mississippi by the Spanish intendant at this time stirred the West to its depths, and gave the Federalists their opportunity to demand war with France and Spain. Although Jefferson made earnest efforts to allay the military spirit, he found it necessary to take some decisive action, and he therefore sent Monroe on a special mission to secure our interests. Monroe's instructions of March 2, 1803, contained three alternatives. He was to try to purchase New Orleans and the Floridas, and, if necessary, he might guarantee to France her territory beyond the Mississippi. If, however, France declined to cede New Orleans, an effort was to be made to secure space enough for a large commercial town on the Mississippi as little remote from the mouth of the river as might be, together with provision for the complete right of deposit. It would appear from these instructions that Jefferson would have been willing to accept merely the right of navigation rather than make the Louisiana Purchase an immediate cause of war. "Peace is our passion," was his maxim, and his policy rested upon the hope of filling the Mississippi Valley with so strong an American population that when the time was ripe, by alliance with England, at some time when England and France might be at war, the United States would be able to procure additional establishments on the Gulf of Mexico. Only in case France compelled hostilities by closing the Mississippi was he ready

at the present juncture to ask an alliance with England.

NAPOLEON GIVES UP ONE EMPIRE ON THE CHANCE OF WINNING ANOTHER.

In the meantime, Napoleon had determined to reopen the war with England, and while Monroe was still upon the ocean, he unfolded to his ministers, Talleyrand and Marbois, his inclination to relinquish Louisiana. To have held it against the advance of the American settlement would have been a task likely to meet the fate that Napoleon's Continental system met when he tried to dam up the great current of European commerce. The belief that combined action by England and the United States would make it impossible for him to occupy New Orleans was an essential factor in the case. The war already determined upon with England would, he believed, result in the loss of Louisiana. On the other hand, by cementing the friendship of the United States by the sale of the province, he would deprive England of a probable ally and enrich his treasury with funds for his approaching operations. The vision of a great colonial empire in America gave place in his mind to new European projects. After all, his genius was suited rather to land power than to sea power, and colonial empire rests upon a great navy. Whatever the considerations by which he was swayed, there can be no doubt that it was due to the impetuous determination of this Titan of the revolutionary era that Louisiana and the preponderance in the Western Hemisphere passed to the United States without a struggle.

THE WHOLE TERRITORY FOR \$15,000,000.

While Livingston was bargaining for a little strip of territory at the mouth of the river, Talleyrand asked him what he would give for all of Louisiana. Few Americans at that day could have realized the importance of the vast wheat and corn lands, cattle fields, and mines which Napoleon was ready to cast into our hands. Certainly, Livingston had no adequate impression of the importance of this wilderness. He demurred at the idea, and denied our interest in the trans-Mississippi country. A week passed in discussion over the price to be paid,—a week not without peril to the interests of the United States, for Napoleon's brothers attempted to dissuade him from the reckless violation of the French constitution and the interests of the republic involved in his arbitrary cession of Louisiana. Fortunately for us, however, Napoleon had determined to be the dictator of France, and for a consideration of \$15,-

000,000, Louisiana was secured to the United States.

RESULTS OF THE PURCHASE—CONSTITUTIONAL AND POLITICAL.

The effects of the Louisiana Purchase upon America were profound. Politically, it resulted in strengthening the loose interpretation of the Constitution. Thomas Jefferson was the author of the Kentucky Resolutions, which affirmed the most stringent doctrine on the subject of State rights and strict construction. Even at this time, Jefferson believed that the treaty of annexation was constitutionally unwarranted. He believed that to carry out the terms of the treaty would be to "make blank paper of the Constitution by construction," and desired a constitutional amendment to validate his action; but to delay was to put the whole acquisition to hazard. His friends among the strictest of the State rights sect argued that the acquisition and incorporation of the territory was constitutional. Practical statesman that he was, he withdrew his doctrinaire ideas in the presence of the splendid opportunities which this acquisition furnished for promoting peace in North America and furnishing the broad foundation of a great democracy. He regarded the case as an exceptional one, and believed that the good sense of the country would correct the evil of construction when it produced ill effects. Nevertheless, this was a practical surrender to the doctrine that popular acquiescence might take the place of constitutional amendment even in such an important matter as doubling the area of the Union and changing the whole physiographic basis of the nation. This broad interpretation of the treaty-making power by the strict constructionist and State rights party itself paved the way for an imperial expansion of the United States. Not only that,—it laid the foundations for a readjustment of sectional power within the Union.

The treaty provided that the inhabitants of Louisiana should be incorporated into the Union and admitted as soon as possible, according to the principles of the federal Constitution, to the enjoyment of all the rights of citizens of the United States. Louisiana was not to be permanently governed as a colonial dependency by a partnership of sovereign States, but the partnership itself was to be enlarged by the action of the President and twenty-six members of the Senate. New England leaders set up the doctrine that the assent of each individual State was needed to admit a new partner. Against an arrangement which would ultimately swamp New England by the votes of representatives

from the West and the South, they made vehement protest, and some even began to consider secession. The importance of the issue thus raised as to whether the new acquisition was to be ruled as an imperial possession or to be absorbed into the Union and thereby overturn the old balance of sections and destroy the safeguards of State sovereignty can hardly be overestimated. The question arose in still another form. By the terms of the treaty, special privileges were extended to vessels of France and Spain in the port of New Orleans. But the Constitution of the United States required that all duties should be uniform throughout the United States. The answer of Jefferson's supporters to the charge that a preference had been given to the ports of one State over those of another was that Louisiana was "territory purchased by the United States in their federate capacity, and may be disposed of by them at pleasure. It is in the nature of a colony whose commerce may be regulated without any reference to the Constitution." The significance of this argument has been illustrated within the last few years by the discussion of the relation of our new Spanish-American possessions to the United States. When the whole sweep of American history and the present tendencies of our life are taken into view, it would be possible to argue that the doctrines of the Louisiana Purchase were farther-reaching in their effect upon the Constitution than even the measures of Alexander Hamilton or the decisions of John Marshall.

Not only did the Louisiana Purchase work a revolution in the constitutional doctrines of the strict constructionists,—it also made certain a change in the conception of Statehood. A glance at the parallelograms beyond the Mississippi to which the names of States are given is sufficient to show the artificial character of the new sisterhood thus made possible by the acquisition of Louisiana. The old idea of Statehood could no longer exist when the fruit of the Louisiana Purchase was made manifest.

In other ways, the Louisiana Purchase profoundly affected American politics. The area of the Louisiana Purchase furnished the issues which resulted in our Civil War. Merely to name the important steps in the history of the slavery conflict is to show the truth of this assertion. The Missouri Compromise, the Kansas and Nebraska Act, and the civil war in Kansas were the prelude to the Civil War. It was in truth a struggle between the rival institutions and political ideals of the North and the South

for the domination of the vast territory beyond the Mississippi. Rival civilizations projected themselves across the river and struggled for ascendancy in a region where nature herself had decreed unity of institutions.

PREDOMINANCE OF THE UNITED STATES IN THE WESTERN HEMISPHERE.

The international effects of the Louisiana Purchase were even more significant than its political effect. From it dates the end of the struggle for the possession of the Mississippi Valley and the beginning of the transfer of the ascendancy in both Americas to the United States. Even the English veterans of the Napoleonic battles were unable to wrest New Orleans from Andrew Jackson in the War of 1812. The acquisition of Florida, Texas, California, and the possessions won by the United States in the recent Spanish-American War are in a sense the corollaries of this great event. France, England, and Spain, removed from the strategic points on our border, were prevented from occupying the controlling position in determining the destiny of the American provinces which so soon revolted from the empire of Spain. The Monroe Doctrine would not have been possible except for the Louisiana Purchase. It was the logical outcome of that acquisition. Having taken her decisive stride across the Mississippi, the United States enlarged the horizon of her views and marched steadily forward to the possession of the Pacific Ocean. From this event dates the rise of the United States into the position of a world power.

The Louisiana Purchase nearly doubled the area of the United States. It added territory equal to the combined area of Great Britain, Germany, France, Spain, Portugal, and Italy. Into this region have poured the descendants of the Americans of that day and a great tide of immigrants, until its population now numbers fifteen million souls. The wheat and corn and oats alone of this region have a value of over three hundred and forty-five million dollars annually. The land which Napoleon wished to be the granary of San Domingo is the granary of Europe. Perhaps most fundamental of all in its effects is the emphasis which the Louisiana Purchase gave to the conception of space in American ideals. The immensity of the area thus opened to exploitation has continually stirred the Americans' imagination, fired their energy and determination, strengthened their ability to handle vast designs, and made them measure their achievements by the scale of the prairies and the Rocky Mountains.

A FORECAST OF GREAT GATHERINGS.

CELEBRATIONS AND ANNIVERSARIES.

THE year 1903 is to be signalized by several important centennial celebrations. Next to the Louisiana Purchase itself, to be commemorated by the great exposition at St. Louis, next year, as well as by a celebration at New Orleans on December 20, next, the most noteworthy anniversary in American history associated with the present year is that of the admission of Ohio into the Union. The centennial anniversary of that event will be celebrated at Chillicothe, the first capital of the State, on May 20-21. The following programme of speakers and subjects is announced: "The Northwest Territory," Judge Judson Harmon, "Date of the Organization of Ohio and the Great Seal of the State," Judge Rush R. Sloane, Sandusky; "Settlement at Marietta," Prof. Martin R. Andrews, Marietta; "Ohio Country in the American Revolution," Hon. E. O. Randall, Columbus; "Ohio in the United States Senate," Hon. Joseph B. Foraker, Cincinnati; "Ohio in the House of Representatives," Hon. C. H. Grosvenor, Athens; "Governors of Ohio Under the First Constitution," Hon. D. M. Massie, Chillicothe; "Governors of Ohio Under the Second Constitution," Hon. James E. Campbell, New York; "Military History of Ohio, Including the War of 1812," Gen. T. H. Anderson, Sandusky; "Military History of Ohio from the War of 1812 and Including the Civil and Spanish-American Wars," Gen. J. Warren Keifer, Springfield; "The Judiciary of Ohio," Judge Moses M. Granger, Zanesville; "Public Schools of Ohio," Hon. L. D. Bonebrake, Columbus; "The University of Ohio," President W. O. Thompson, Ohio State University, Columbus; "Ohio in the Navy," Hon. Murat Halstead, Cincinnati; "The Ethnological History of Ohio," Gen. B. R. Cowen, Cincinnati; "The Press of Ohio," S. S. Knabenshue, Toledo; "Religious Influences in Ohio," Bishop C. C. McCabe, Omaha, Neb.; "Ohio Literary Men and Women," W. H. Venable, Cincinnati; "The Part Taken by Women in the History of Ohio," Mrs. J. R. Hopley, Bucyrus; "Industrial Development of Ohio," Marcus A. Hanna, Cleveland.

While Ohio and the Louisiana Purchase States are celebrating centennials, the far more ancient

city of New York, calm in its sense of antiquity, is quietly preparing to mark the two-hundred and-fiftieth anniversary of its civic life in an appropriate manner on May 26. On that day, a meeting of the aldermen and all the officials of the city will be held in the City Hall. Mayor Low will preside, and an historical address will be made by Gen. James Grant Wilson. Patriotic exercises will be held in the public schools, and at night, stereopticon pictures of historical events will be shown in the public squares of the city.

One other anniversary occasion, also occurring in the month of May, should be noted here,—the centenary of Emerson's birth, which will be celebrated on May 25. Emerson societies and similar associations in all parts of the country will mark this date by appropriate exercises, the most interesting of which will probably be those at Emerson's home town, Concord, Mass. On the preceding evening, Sunday, May 24, there will be a memorial service in Symphony Hall, Boston, which will be addressed by President Eliot, and at which a poem will be read by Prof. George E. Woodberry. At Concord, on the following day, addresses will be delivered by Senator Hoar, Colonel Higginson, Prof. Charles Eliot Norton, and others. The Free Religious Association, of which Emerson was one of the founders, will devote the principal session of its annual convention, in May, to the subject of Emerson's religious influence. This association is also arranging for an Emerson memorial school, or conference, for three weeks, beginning on July 13. The morning sessions of the school will be held at Concord, and the evening sessions in Boston. In the thirty lectures to be delivered at this conference, the various aspects of Emerson's work and influence will be considered.

FOREIGN EXPOSITIONS AND CONGRESSES.

Pending the opening of the St. Louis World's Fair, a year hence, no industrial exposition of more than local significance will be held anywhere in the United States. In foreign countries, several interesting expositions are now open, and any of these will doubtless well repay the American traveler who chances, during the coming months, to go slightly out of his way for the purpose of visiting them. First among these in novelty, if not in intrinsic importance, is the great national industrial exhibition of

Japan at Osaka. Osaka is a populous city twenty miles by rail from Kobé and nearly the same distance from Kioto. On the exposition grounds, buildings have been erected to represent the following departments: agriculture, forestry, marine products, industries, machinery, education, fine arts, transportation, live stock, and fisheries. There will also be a foreign sample building, in which will be samples of articles produced or manufactured in foreign countries. Adjoining the exhibition grounds, there are extensive buildings erected for the sale of goods produced in all the different provinces of Japan, forming a great bazaar. It is announced that during the exposition there will be an assembly of ten thousand Buddhist priests at one of their temples in the city to commemorate the thirteen-hundredth anniversary of the death of Prince Shotoku. It is said that this will be the second time that such a ceremony has ever been held in Japan, the first having been celebrated twelve centuries ago.

During the month of July, a German shoemakers' exhibition will be held at Hamburg. It is stated that the prime object of this exposition is the promotion of technical education in the shoemaking industry. There will be exhibits of the work of apprentices and masters of the German School for Shoemakers, of leather and tanning materials, of shoemakers' lasts, tools, and instruments of various kinds, of machinery employed in the manufacture of shoes, and of other articles used or consumed in the shoemaking trade. Foreigners are invited to exhibit machinery for the manufacture of shoes, but all shoes manufactured in foreign countries in bulk for the general trade and placed upon the market in large quantities are excluded.

An exhibition of engineering machinery, hardware, and allied trades is now being held at the Crystal Palace, London, and will close on May 31.

An international fire exhibition is to be held at Earls Court, London, from May to October. Exhibits of American inventions are requested. The exhibits will include building-construction, building equipment, electrical and heating safeguards, fire-extinguishing appliances, life-saving appliances, fire station and equipment, fire alarms, telephones and telegraphs, salvage corps appliances and stations, ambulance equipment, temporary hospitals, waterworks and water fittings, insurance companies and insurance equipment, fire brigades, fire survey, and the history and literature of the subject.

An international firemen's competition will be held at Havre, France, from May 31 to June 1, under the auspices of the mayor of the city and other distinguished citizens. The exercises will

consist of maneuvers of fire engines, hook and ladder companies, and so forth. The juries will be composed of French and foreign firemen who are in active service. An honor prize will be given for the best execution of maneuvers, and also a prize to the company which presents the best appearance both as to its *personnel* and as to its apparatus. Organized fire departments in all parts of the world are invited to send representatives.

FOR IMPROVED SANITATION.

The only industrial exposition to be held in France during the year will be that at Rheims, from May 15 to September 6, but an international exposition of improved housing is to be held in the Grand Palace of the Champs Elysées, at Paris, from June 29 to November 15. The object of this exposition is to contribute to the solution of the problems connected with the housing of working people throughout the world by setting forth models of improved houses of different kinds of materials and styles of construction, models of furniture and decoration, and, in a word, exhibiting the whole range of improvement in housing. Since this question of improved dwellings touches all those problems that concern the comfort and the hygiene of cities,—cleanliness, sanitation, purity of water-supply, systems of drainage, facilities of traffic, and so forth, it is important that these various interests should all be represented in the exposition. It is believed that much will be accomplished by way of arousing public sentiment in support of the improved-housing movement throughout the world. American coöperation has been sought by the managers of the exposition, and the American Institute of Social Science is to be represented at the congress to be held in connection with the exposition. A special committee has been appointed to coöperate with this international housing congress. The plans of the municipal exposition at Dresden are outlined on pages 571-573 of this number.

An interesting congress of hygiene and demography is to be held at Brussels from September 2 to September 8; the questions to be discussed will include bacteriology, microbiology, parasitology applied to hygiene, alimentary hygiene, applications to chemical and veterinary sciences, sterilization, use of antiseptics, sanitary technology, industrial and professional hygiene, hygienic transportation, best means of disinfection, administrative hygiene, aim and organization of medical inspection, quarantine regulations, and supervision of tenement-houses. Immediately after this congress of hygiene, there will be held, also at Brussels, an international dairy

congress, under the auspices of the National Dairy Association of Belgium. This congress will discuss the principal subjects of international importance related to the dairy industry, such as—(1) an international convention for the repression of fraud in the butter and margarin industry; (2) hygiene of milk and milk products; (3) creation of an international dairy association.

RELIGIOUS GATHERINGS.

The usual number of conventions and other occasions of a distinctly religious character have been announced for the forthcoming summer and autumn months. Additional interest is imparted to the various meetings of Methodist clergy and laity by the fact that this summer occurs the two-hundredth anniversary of the birth of John Wesley. This anniversary will be celebrated in different parts of the United States at different times.

For instance, there will be a celebration on May 27 at Minneapolis. The old-style date of Wesley's birth is June 17, and this day will be observed in many places. The Sunday before—June 14—however, which has been set apart as Children's Day, will be devoted to a celebration of the bicentenary in all the Sunday-schools of the Methodist Episcopal Church. Sunday, June 28, has been set apart in many places as the day of celebration, because that is the new-style date. Wesleyan University, at Middletown, Conn.; Northwestern University, at Evanston and Chicago, Ill.; Ohio Wesleyan University, at Delaware, Ohio; Allegheny College, at Meadville, Pa.; and, indeed, every educational institution of the Methodist Episcopal Church of any importance will observe the bicentenary in some way, at some time before June 28. There is no prearranged plan for the observance of the bicentenary, each institution following its own inclination in the matter.

YOUNG PEOPLE'S ORGANIZATIONS.

The only great Methodist meeting of a national character occurring during the year will be the International Convention of the Epworth League at Detroit, July 16-19. At this convention, the temperance, missionary, and other interests of the denomination will be represented, and on one evening there will be two "industrial" mass meetings.

The Twenty-first International Christian Endeavor Convention will be held at Denver, Colo., July 9-13, 1903. The meetings will be held in Auditorium Endeavor, an immense tent seating ten thousand people, and in a number of the

largest churches. Delegates will be present from all the States, Territories, and provinces, and most of the foreign countries. The programme will cover all phases of young people's work, interdenominational and international fellowship, home and foreign missions, social questions, and Christian citizenship. A special feature will be a school of methods, which will meet each morning of the convention for definite study under the leadership of experts in different lines. The new general secretary, Mr. Von Ogden Vogt, will be introduced to the work at this convention. The speakers will include many prominent leaders in religious, philanthropic, and political life.

While the Christian Endeavor delegates are assembled by thousands and tens of thousands at Denver, another great body of young people, coming from the Baptist denomination of America, will be gathered at Atlanta, Ga., to consider similar themes, and at Akron, Ohio, during the same week, the Young People's Christian Union of the Universalist Church will be represented in a convention attended by some three thousand delegates. In these three simultaneous meetings of American young people interested in religious work, every section of the Union will participate, and so all the sections will be brought into close touch with one another.

During June and July, five conferences of college students will be held under the direction of the Student Department of the International Committee of Young Men's Christian Associations. These gatherings will meet at Gearheart, Ore., opening May 29; Asheville, N. C., June 13 to 21; Lake Geneva, Wis., and Lakeside, Ohio, June 19 to 28; and Northfield, Mass., June 26 to July 5. The purpose of the conferences is to promote manly Christian living and high Christian ideals among college men, and to train the leaders of organized Christian work among students to carry on their work most effectively. The daily programme at each of these conferences consists of public addresses on religious subjects by leading clergymen and laymen; normal Bible classes, to prepare students to become leaders of groups of Bible study in the colleges; conferences for the discussion of practical methods of promoting religious life among students; and meetings to consider the various phases of the foreign and home missionary problems. It is customary also to hold, each evening, a conference at which the various callings needing Christian college men are presented. The afternoons of these conferences are always devoted to athletics and other forms of recreation. Last year, about fifteen hundred college men attended these gatherings, which have had a very

marked influence upon the life of the universities and colleges of the United States and Canada.

The largest of the Northfield gatherings will be the General Conference of Christian Workers, July 31 to August 16.

The Young Women's Conference at Northfield, July 7-15, corresponds to the Young Men's Conference.

The dates of the summer gatherings of the Young Women's Christian Associations are as follows:

The sixth Pacific Coast conference, at Capitola, Cal., May 15-26; the ninth Southern conference, at Asheville, N. C., June 13-23; the eleventh Eastern conference, at Silver Bay, Lake George, N. Y., June 26-July 6, student section, and July 10-20, city section; and the thirteenth Western conference, at Lake Geneva, Wis., August 15-25, student section, and August 26-September 4, city section.

The ninth biennial convention of the association occurred at Wilkesbarre, Pa., April 15-19.

MISSIONARY ANNIVERSARIES.

Important conferences of leaders for missionary work in Sunday-schools and young people's societies are to be held at Silver Bay, Lake George, and at Lookout Mountain, Tenn., in the month of July. These conferences aim to combine exceptional vacation facilities with practical training for more effective missionary work in young people's societies and Sunday-schools. The conference at Lookout Mountain will be held during the first eight days of July, and that at Lake George, July 22-31.

The ninety-fourth annual meeting of the American Board of Commissioners for Foreign Missions will be held in Manchester, N. H., October 13-16, 1903. The main features of the meeting have been already decided upon, and include the annual reports of the home and foreign secretaries and of the treasurer of the board; the annual sermon, by W. G. Sperry, D.D., president of Olivet College; addresses by the president of the board; by President Charles Cuthbert Hall, D.D., of Union Theological Seminary; by Rev. George A. Gordon, D.D., of Boston; by one of the secretaries of the board, and by several of the missionaries now at home on furlough.

The fifty-seventh annual meeting of the American Missionary Association is to be held in Cleveland, Ohio, October 20-22, 1903. This association is a national organization. Representatives will be present from many States and Territories, from Alaska, and from Porto Rico. The work of the association is educational and

evangelistic. It maintains one hundred and seven institutions of learning of various grades. It has given especial emphasis to industrial training, having introduced this method into the South and among the Indians of the West. The negro problem is given especial attention in the work of this association. The industrial, educational, and religious development of the colored people in the South has been greatly promoted by its work. Several of its institutions are now conducted by colored principals and teachers, and are doing very efficient service. In Porto Rico, our new island territory, training-schools have been established, the one at Santurce having plans for especial training in agriculture.

The Baptist national anniversaries will be held in the Prospect Avenue Baptist Church, Buffalo, N. Y., May 18-26. The meetings are advisory, and not legislative, as all Baptist churches are independent. The three great missionary organizations will hold sessions in the following order: The American Baptist Home Mission Society, the American Baptist Missionary Union, and the American Baptist Historical Society. These societies will take two full days each. They represent a constituency of Northern Baptists of about one million two hundred thousand. The Southern Baptist body has a constituency twice as large, and is separate. In addition to the three societies above named, there will be meetings held by the Women's Home Mission Society and the Women's Foreign Mission Society, by the Baptist Historical Society, the Baptist Education Society, and the Young People's Union of America.

MEETINGS OF VARIOUS DENOMINATIONS.

The one hundred and fifteenth General Assembly of the Presbyterian Church in the United States of America will meet at Los Angeles, Cal., on May 21. The Rev. Dr. Henry van Dyke, the retiring moderator, will preach the annual sermon, and the question of the adoption of the proposed revision of the Confession of Faith will be put to vote. The General Synod of the Reformed Church in America will meet at Asbury Park, N. J., on June 3. On the same day, the General Synod of the Evangelical Synod of the Lutheran Church of the United States will assemble at Baltimore, Md. The Evangelical Association will hold its general conference, this year, at Berlin, Canada, on October 1, meeting for the first time outside the United States.

The American Unitarian Association will hold its annual meeting in Tremont Temple, Boston, May 19-20; and the Universalist General Convention expects to meet at Washington, D. C., on October 23 for its biennial convention.

CONFERENCES FOR SOCIAL BETTERMENT.

The influence of the great national conferences that are held every year in this country for the improvement of social and political conditions can hardly be overestimated. Sooner or later, every nook and corner of the land is brought within the range of this influence. As an instance, can any one doubt the value to any city of the impetus given to all its forms of charitable work by the meeting of such an organization as the National Conference of Charities and Correction, with its membership of experts, its intelligently planned programmes, and its wisely directed counsels? Last year, the conference met at Detroit, two years ago at Washington, three years ago at Topeka, Kan.; this year it will invade the South, and will hold its sessions from May 6 to 12, inclusive, at Atlanta, Ga. The two hundred delegates appointed by Governor Terrell to represent Georgia in this conference will meet with representatives of almost every State in the Union. The neighboring Southern States will probably be more fully represented than ever before in such a gathering. All the difficult problems connected with poor relief and the care of the defective and delinquent classes will be discussed, and the South will be able to profit from the experience of the Northern and Western States.

The Charities Conference is only one of several national organizations devoted to discussion and practical endeavor along lines of social amelioration. Among the societies which will hold meetings during the coming season for the purpose of considering the same class of problems are the American Social Science Association, which will meet this year at Boston, on May 14; the American Humane Association, the date of whose annual meeting has not yet been definitely fixed; the American Public Health Association, which will meet on November 2, at Washington, D. C.; and the American Park and Outdoor Art Association, a flourishing organization, which will hold its seventh annual meeting at Buffalo, July 7-9. Closely allied also with the Charities Conference are the National Children's Home Society, which will meet at Pittsburg, on June 17, to discuss the problem of the care of homeless and neglected children, and the National Prison Association, which holds its annual meeting in September. Several of the societies that we have named are semi-official in character, city, State, and county governments being represented very largely in their membership. An organization consisting exclusively of officials is the League of Amer-

ican Municipalities, membership in which is held, not by individuals, but by American city governments, represented at the annual conventions by their mayors, aldermen, or other officials. The seventh annual convention of this body is to be held at Baltimore, October 7-9. The eleventh national Conference for Good City Government, and the ninth annual convention of the National Municipal League, were held at Ann Arbor and Detroit, Mich., in the latter part of April.

EDUCATIONAL, PROFESSIONAL, AND SCIENTIFIC MEETINGS.

It has long been the boast of American educationists that the great summer meetings of teachers in this country have excelled in numbers and enthusiasm similar gatherings held anywhere in the world. The meetings of the National Educational Association, held each July for many years, have been in the nature of huge mass meetings, the attendance often running far up into the thousands and tens of thousands. Although these meetings occupy but a few days, they are so organized and systematized as to details that any wideawake American teacher, either of the higher or lower grades, is able to get from them what is most profitable in the prosecution of his or her professional duties. The association now includes eighteen departments, each one of which holds separate sessions during the week of the meeting. This year's meeting will take place, July 6-10, in the city of Boston; President Eliot, of Harvard, will preside. The association now has a permanent membership of 10,000.

An educational conference appealing to a smaller constituency is the annual Convocation of the University of the State of New York, which will be held, this year, June 29-30, at Albany. The attendance at this meeting, however, is never confined to the teachers of New York State. Many eminent educators not residents of New York have in past years participated in the convocation. The discussions of this body are chiefly related to the progress of secondary and higher education.

In addition to the regularly appointed educational meetings of the present year, a special conference of college presidents has been called to meet at Chicago, May 8-9, to consider the relation of the college to the professional school. This conference was called by President James, of the Northwestern University.

The American Library Association has come to be recognized the country over as a leading educational agency. It has a present member-

ship of fifteen hundred, including, not only librarians, but many trustees of public libraries and others associated in one way or another with the progress of the public-library movement in this country. At the meeting to be held at Niagara, June 23-27, the three leading topics of discussion will be: (1) Training for Librarianship; (2) Fiction in Public Libraries; (3) Centralization and Coöperative Library Activities; (4) Libraries and the Book Trade. The subject of training for librarianship has just been brought prominently forward by Mr. Carnegie's recent gift to Western Reserve University of \$100,000 to found and endow a library school, and it is quite likely that matured plans for this school will be discussed by the association. It is expected that many Canadian librarians will find it possible to attend this Niagara meeting.

The National Congress of Mothers may fairly be regarded as an educational body, since so great a part of its programmes at the annual meetings is devoted to the effective coöperation of home and school. The congress is also doing much to stimulate organizations and individuals to secure wiser and more effective methods of dealing with the helpless and unfortunate children to be found in every community. This year's convention will be held at Detroit, May 5-8.

The usual conventions of the medical, legal, and engineering professions will be held, this year, at various points East and West. The American Bar Association has chosen the famous Hot Springs resort of Virginia as a meeting-place, with August 26-28 as the date. Mr. Francis Rawle, of Philadelphia, the president of the association, will deliver the annual address, discussing the most noteworthy changes in statute law of the past year. The American Medical Association will meet at New Orleans, May 5-8; many other important medical and surgical societies, including the American Academy of Medicine, the Association of American Physicians, and the American Surgical Association and its affiliated societies, will meet at Washington, D. C., during the month of May.

The American Institute of Homeopathy will meet at Boston, June 22-27; the National Eclectic Medical Association at Indianapolis, June 9-11; and the American Association of Physio-Medical Physicians and Surgeons at Indianapolis, May 21-23.

The American Association for the Advancement of Science, which, with its affiliated societies, embraces practically all of the important scientific activities in the United States, has changed its time of meeting from the summer

months to the Christmas holidays, thus removing from the catalogue of great summer gatherings one of its most conspicuous and interesting features. For many years, it has been the custom of the REVIEW OF REVIEWS to include in this annual forecast a brief synopsis of the programme to be presented at each forthcoming meeting of the American association. Now, however, since the meeting is more than eight months hence, it will be impossible to announce any of the details of the programme. The next meeting will be held at St. Louis, in the week beginning December 28, 1903, and ending January 2, 1904. There will be one summer scientific meeting this year of considerable importance,—that of the American Forestry Association, at Minneapolis, late in August, the exact date not having as yet been definitely determined. A special meeting of the American Ornithologists' Union will be held in California—probably at San Francisco—May 15-16; the annual session of this society will begin on November 16 at the Academy of Natural Sciences, in Philadelphia.

SUMMER SCHOOLS.

The summer-school movement in this country has been vigorous for many years; but never, since the REVIEW OF REVIEWS began to observe its growth, from year to year, have the signs of healthful activity been more numerous than at present. Many summer schools, it is true, have died early deaths, but those that survive have better support and are certainly more worthy of support than in the early and tentative period. The college and university summer school has apparently come to stay. The teachers' summer school, too, seems to be a fixture. The large, popular lecture-course schools are less numerous than they were a few years ago; but a few are still maintained successfully in almost every section of the country.

Just now, the most interesting phase of the summer-school movement is to be seen in the South. There, the leading educators are uniting in an effort to make of the summer school an efficient ally in the task of quickening the educational conscience of the people. The first session, last year, of the Summer School of the South, at Knoxville, Tenn., was most successful, not only in opening new opportunities to Southern youth, but in stimulating an interest in the educational advance movement that is making its presence felt over the entire South. The whole work at Knoxville was conducted in the interest of the public-school system, and the work that will be done at the forthcoming session (June 23-July 31), supported by the Gen-

eral Education Board, will be directed with a view to promoting the great campaign in behalf of public education now in progress in most of the Southern States.

Provision has also been made by the General Education Board for other similar work, and especially for a summer school to be held at the Tuskegee Institute, Tuskegee, Ala., from June 29 to August 7, for the benefit of colored teachers.

THE CHAUTAUQUA INSTITUTION.

The word "assembly" in connection with the Chautauqua Institution has a unique meaning. The assembly includes a popular programme of university-extension lectures on literary and scientific subjects; frequent concerts by prominent soloists, assisted by the Chautauqua chorus of five hundred voices and an orchestra of twenty pieces; popular lectures and readings by men and women of national reputation; and also many attractive entertainments, such as athletic exhibitions, prize spelling and pronunciation matches, illuminated fleet, open-air band concerts, evenings of magic, etc. The assembly will convene at Chautauqua, N. Y., on Chautauqua Lake, July 2 to August 30, 1903, for the thirtieth annual session.

At the same time, there will be in session the Chautauqua Summer Schools, with two terms of three weeks each, beginning July 6 and 27, respectively. Dr. George E. Vincent is the principal. These schools enroll about twenty-five hundred students, and the 90 instructors offer 160 courses. The instruction includes English, Classical and Modern Languages (French under the direction of the Alliance Française), Science, Mathematics, Sociology, History, Psychology, Pedagogy, Kindergarten, Religious Teaching (including a Sunday-school Institute, July 27-August 1), Domestic Science, Arts and Crafts, Library Training, Music, Fine Arts, Expression, Physical Education, Business, etc. In such an environment, the student gains, not only a deeper insight into the subjects pursued under university, college, or normal-school instructors, but opportunity is afforded to attend the best lectures and concerts and to seek recreation in the outdoor sports of golf, tennis, rowing, sailing, fishing, etc.

Emphasis should be placed on the national character of the summer assembly of the Chautauqua Institution. While many of the more than forty thousand visitors come from New York, Pennsylvania, and Ohio, a large number of people representing the far South and West make Chautauqua their summer rendezvous.

In 1878, the first class for the home-study work was organized at Chautauqua, and the twenty-fifth anniversary of this event, will be

celebrated during the coming August. Appropriate exercises will be held in commemoration of the various steps in the growth of the movement which during its quarter-century has enrolled three-quarters of a million of readers and numbers more than forty thousand graduates. Dr. Edward Everett Hale, one of the councilors, and other distinguished men, will take part in the exercises, which will include the laying of the corner-stone of the New Hall of Philosophy.

OTHER SUMMER-SCHOOL ACTIVITIES.

It is interesting to note in this connection that the Catholic Summer School organized some years ago on Lake Champlain has continued to prosper, and that its courses of lectures are recognized as of the highest scholastic value. During the coming summer, the school will be open for the nine weeks from July 6 to September 4. The courses of study have been arranged with reference to the approved plans for self-improvement among teachers and members of reading circles. An important feature of this school is its work in English literature. Courses are also announced in the principles and methods of teaching, in biology, and in music and physical culture.

The seventh summer assembly of the Jewish Chautauqua Society will be held at Atlantic City, N. J., July 9-29. One of the principal features of this assembly will be the series of popular conferences for the discussion of important problems of living interest. Thus, one of these conferences will take up the theme "Jewish University Students—Their Attitude Toward Jewish Problems." Mr. Lehman, the first recipient of an American Rhodes Scholarship at Oxford, will speak as a representative of Yale. Other representatives of various leading universities will participate. At a conference on applied philanthropy, the topic to be considered will be "The Coöperation Between Jewish Charity Workers and Immigrants."

An institution that has amply proved its worth and usefulness is the Summer School in Philanthropic Work conducted by the Charity Organization Society in New York City. The sixth session of this school will open on June 22, and will continue for six weeks. The programme of instruction will include a study of the care and treatment of needy families in their homes, the practical work under the direction of the agents of the Charity Organization Society; visits to institutions for the care of destitute, neglected, and delinquent children; observation of the work of hospitals and dispensaries, study of the institutional care of adults, and the study of public

playgrounds, vacation schools, recreation piers, and the various neighborhood improvements to be seen in a modern city. The director of the school, this year, as in past seasons, is Dr. Philip W. Ayres.

Space fails us to mention the various forms of summer-school effort that will be in evidence throughout the country during the coming season. A list of the universities and colleges that open their doors for instruction during the whole or a part of the long vacation would be virtually a list of all the institutions of higher education in the United States. There are also large enterprises designed especially to meet the needs of teachers, like the Martha's Vineyard Summer Institute. All of these institutions are well attended, and it can no longer be said that educational work flags at all in this country during the summer months.

MUSIC FESTIVALS.

Only a few music festivals of importance are to be held in the United States this year, but all American music-lovers are interested in the performance of the Wagner operas to be given in the new Prince Regent Theatre at Munich. There will undoubtedly be a much larger attendance at this festival, owing to the fact that there will be no performance at Baireuth this season. Following are the dates of the Munich performances:

1st Cycle. August 8 to 18.

Der Ring des Nibelungen. Lohengrin. Tristan und Isolde. Tannhäuser. Die Meistersinger von Nurnberg.

2d Cycle. August 17 to 28.

Tannhäuser. Die Meistersinger von Nurnberg. Lohengrin. Tristan und Isolde. Der Ring des Nibelungen.

3d Cycle. August 21 to September 1.

Lohengrin. Tristan und Isolde. Tannhäuser. Die Meistersinger von Nurnberg. Der Ring des Nibelungen.

4th Cycle. August 25 to September 5.

Der Ring des Nibelungen. Tannhäuser. Die Meistersinger von Nurnberg. Lohengrin. Tristan und Isolde.

5th Cycle. September 4 to 14.

Lohengrin. Tristan und Isolde. Tannhäuser. Die Meistersinger von Nurnberg. Der Ring des Nibelungen.

Another great festival of Bach's music will take place at Bethlehem, Pa., May 11-16. The "Christmas Oratorio," and "St. Matthew's Passion," which were rendered under the same auspices two years ago, will be repeated this year, together with a number of church cantatas.

There will be six days of service and music planned to commemorate, in succession, the birth of Christ, the Passion, and the joy of Easter.

The forty-sixth annual Festival of the Worcester County Musical Association will be held at Worcester, Mass., in the week of September 28-October 3. The conductors will be Wallace Goodrich and Franz Kneisel, their successful dual leadership of chorus and orchestra, last year, guaranteeing continued interest in these important factors of the festival. The festival chorus, four hundred voices, has been rehearsing weekly since New Year's under Mr. Goodrich, and the two great choral works, "Elijah" and "Franciscus," are now familiar to all the singers. Coincident with a change in festival administration, it is announced that the festival will consist of five concerts, and as many, if not more, public rehearsals. For some years past, seven concerts have been given in four days, and the strain on chorus, orchestra, and patrons has been severe. This year, with fewer concerts and more joint rehearsals of chorus and orchestra, higher artistic results will be obtained and patrons given more enjoyable series of concerts. The orchestral works to be performed are not yet selected. The two choral works include "Elijah" and a novelty in Edgar Tinel's oratorio "Franciscus," a work that has had but two American performances, but which ranks extremely high in Europe among modern compositions. The work is attractive in rehearsal, and its performance, the first thoroughly prepared one in this country, is likely to draw to the Worcester Festival many musicians who wish to keep in touch with the newest great oratorio.

The twentieth triennial Saengerfest of the Northeastern Saengerbund, at Baltimore, promises to be the largest affair of the kind ever held in America. It is expected that six thousand singers will take part in the two principal concerts, which take place on June 15 and 16, and that in the welcoming concert on June 14 four thousand children from the public schools will be added to the large chorus of the United Singers of Baltimore. President Roosevelt will be present at the first concert, June 15, when Director Melamet's new work, entitled "America," will be rendered by a solo soprano, a large chorus, and a grand orchestra of one hundred and fifty musicians. The rehearsals for the three great concert programmes are now going on in the various cities east of the Alleghany Mountains, and Prof. David Melamet, director of the fest, goes from city to city to superintend them.

LEADING ARTICLES OF THE MONTH.

A GREAT CONGRESS OF ARTS AND SCIENCES AT ST. LOUIS.

PROFESSOR HUGO MÜNSTERBERG, of Harvard, tells in the May *Atlantic Monthly* of the elaborate and well-considered plan of presenting at the St. Louis Exposition the work of the world's scientists to date. The Congress of Arts and Sciences at St. Louis is



PROFESSOR HUGO MÜNSTERBERG.

going to be remarkable among institutions of the sort in its deliberate purpose to attain unity of thought, instead of presenting a mass of scattered specialistic researches, according to the traditional scheme of world's fair congresses. So far, a long list of unconnected meetings, with a long programme of unconnected papers, have characterized the congresses of the great expositions, and real scholars have come to the conclusion that such arrangements were on the whole useless and without any important value for science.

At the specific instigation of Professor Münsterberg, the St. Louis Congress of Arts and Sciences will be one congress with a hundred or more sections, bringing the inner relations of all branches of knowledge to light.

The ambition of the able men in charge of this department of the St. Louis fair is not small, and they have ransacked the whole world for the first-rate men of science who have a view beyond the narrow limits of their special problems, and have the authority to express the principles, to lay down the methods, and to judge fairly of the fundamental problems of their sciences.

Professor Münsterberg proposes to allow a fair honorarium to the European men of science, inviting them to prepare each a definite piece of work in the service of the complete plan. The American scientists are to be paid, too, with a less allowance for traveling expenses, and Professor Münsterberg believes that the presence of some hundreds of European and American scientists of the first rank will bring thousands of younger and lesser men to play their part without honoraria.

THE CLASSIFICATION OF KNOWLEDGE.

The administration of this congress has divided human knowledge into two parts, seven divisions, twenty-five departments, and one hundred and thirty sections, with the possibility of an unlimited number of sub-sections. An extraordinary amount of thought of the best quality has been given to this classification of human knowledge, and Professor Münsterberg's explanations of the principle on which the classification was made is amply worth careful reading.

The Congress of Arts and Sciences is to meet at St. Louis on Monday, September 19, 1904, opening with an assemblage of all its members. It first divides itself into divisions, after that into its departments, then into its sections, and, finally, into its last ramifications. For Monday morning, the opening day, the subject for the whole congress is knowledge as a whole, and its marking off into theoretical and practical knowledge. Monday afternoon, seven divisions meet in seven different halls. Tuesday, the seven divisional groups divide themselves into the twenty-five departments, of which the sixteen theoretical ones meet in sixteen different halls on Tuesday morning, and the nine practical on Tuesday afternoon. In the following four days, the departments are split up into the sections, the seventy-one theoretical sections meeting on Wednesday, Thursday, Friday, and Saturday, about eighteen each morning, in eighteen halls; and the fifty-nine practical sections on the same days and afternoons. During the first week, there will be a system of two hundred and sixty

sectional, fifty departmental, seven divisional, and three congressional addresses which belong internally together and are merely parts of the one great thought which the world needs—the unity of knowledge.

Professor Münsterberg says that only men of science of the first class will participate in this great plan, and he and his colleagues are looking for such in all the countries of the world.

A VAST PROPAGANDA OF SCIENCE.

"Only the first two days' work will be essentially the welcome gift of the hosts—the contribution of American scholarship. In every one of the one hundred and thirty sections, however, at least one of the leading addresses will be offered by a leading foreign scholar, and all countries will be represented. Every address will be followed by a discussion, but our work will not be really completed when the president delivers, on Sunday, his closing address on the harmonization of practical sciences. The spoken word is then still to be transformed into its lasting expression. The exposition has voted the funds, not only to remunerate liberally all those who take their share in the work, but also to print and publish in a dignified form those three hundred and twenty addresses as a gigantic monument of modern thought, a work which might set the standard for a period, and will do, by the unique combination of contributors, by its plans and its topics, by its completeness and its depth, what in no private way could be accomplished. Hundreds of colleagues are helping us to select those men for the departments whose word may be most helpful to the whole. Thousands will listen to the word when it is spoken, and the printed proceedings will, we hope, reach the widest circles, and thus become a new force in the progress of civilization, a real achievement of science."

THE KEY TO EMERSON'S INFLUENCE.

OF the many tributes to Ralph Waldo Emerson, called for in the magazines by the occasion of the centenary of the philosopher's birth, one of the finest is from Thomas Wentworth Higginson, in the *May Success*. Emerson was not considered a man of marked ability, in his younger days, as compared with his two brothers, who died in their youth. His young wife also died early, his health was poor, and, though he had some success as a preacher, he never got the invitation to teach rhetoric at Harvard, which he would have been glad to receive, and he left Boston to make Concord his home and live by literature and teaching.

THE ESSENCE OF HIS TEACHING.

"When we ask ourselves for the key to Emerson's influence, we find it more nearly by, turning back to the careers of George Fox and Elias Hicks than to any other spiritual teachers of modern days. Like them, he said, 'Look within.' He trusted in the inward light. He said to the graduates of Divinity College, Cambridge, July 15, 1838: 'Men have come to speak of the revelation as somewhat long ago given and done, as if God were dead. . . . The soul is not preached. . . . The office of a true teacher is to show us that God is, not was; that he speaketh, not spake.' To every graduate, he said, 'Yourself, a new-born bard of the Holy Ghost, cast behind you all conformity and acquaint men at first hand with the Deity.' These words were met with loud outcries of indignation, but they made their way and have ever since been making it. In all religious bodies, save the most illiterate, they have unconsciously reached human minds, and you are liable to recognize their influence in any sermon you hear. Their germ had been visible in his little volume called 'Nature,' published in 1836, the year before, at a time when the book of Oriental philosophy,—to which we sometimes hear his doctrines attributed,—had not reached America, and had not, indeed, been largely published in England. This volume, 'Nature,' it may be remembered, was written in the same chamber of the 'Old Manse' in which Hawthorne wrote his 'Mosses.' It took twelve years to sell five hundred copies of it, but it was the beginning of a really original American literature, although it was his later oration, 'The American Scholar,' which has been called 'our intellectual declaration of independence.'

HIS INFLUENCE ON GREAT ENGLISHMEN.

"The especial source of his wide influence has no doubt come from those passages of strong simplicity which are found amid the occasional abstruseness of his poems, and the similar passages which his prose writings offer. So perfect are these statements that, as Dr. Holmes well said, 'the moment after they had been written, they seemed as if they had been carved on marble for a thousand years.'

"It is not too much to claim that in the vast armies of our Civil War there were thousands of youths who, in moments of difficult decision, had repeated these words to themselves. Written at the very beginning of the war, these lines held their influence until its ending, and, indeed, ever since. We know the vast influence that Emerson exercised through Tyndall, especially;

through Carlyle, who always made Emerson the exception from his general condemnation of the human race; and also through the unwilling Matthew Arnold, who never praised anything American, if he could help it, but who pronounced Emerson's essays to be 'the most important work done in prose in this century.'

EMERSON'S PANTHEISM.

"One phrase of Mr. Emerson's, often quoted, was in his own case disproved,—Great geniuses have the shortest biographies; their cousins can tell you nothing about them.' His biographies are multiplying and growing larger, and thirty-three lectures on him are planned by the Twentieth Century Club. Moreover, in no book, I think, have we more intimate glimpses of Emerson than in the little volume of Rev. Dr. Haskins, his cousin. When this gentleman was the rector of Grace Church in Medford, and had invited Emerson to lecture there in the lyceum, his people expressed their surprise at such an invitation, because they had supposed that Emerson did not believe in God. Mr. Haskins said to the sage, at the tea-table, before the lecture, 'I think I am entitled to ask what you would have answered if the inquiry had been made of you, "Do you believe in God?"' His reply, though quaintly worded, was, nevertheless, very gravely and reverently made: "When I speak of God, I prefer to say "It,"—"It." "I confess," says Dr. Haskins, 'that I was, at first, startled by the answer; but, as he explained his views in the conversation which followed, I could discover no difference between them and the commonly accepted doctrine of God's omnipresence. Conversing lately with my good friend and neighbor, Rev. A. P. Peabody, concerning Mr. Emerson, I remarked that I thought his pantheism was the best kind. "I do not call it *pantheism*," said Dr. Peabody, "I call it *hypertheism*!"'

HIS GREAT ACHIEVEMENT.

"Emerson's great achievement lay in impressing upon Americans, apart from all theological speculations, the supreme importance of the higher nature, the moral life, the intellectual being. Believing in democracy, in the sense that he was never surprised by the advent of genius and virtue from the most unexpected quarters, he yet prized all classes only in proportion as they yielded these high qualities. This made him, wherever his influence reached, our best antidote for all meanness. If we yet retain an unspoiled America, it is due more largely to his leadership than to any other. He was the teacher of our teachers, the guide of our guides."

THE CZAR'S MANIFESTO: ITS GENESIS AND MEANING.

THE story most generally credited in Europe as to the genesis of the Czar's manifesto of March 11, to which allusion was made in the April number of the REVIEW OF REVIEWS, is that it is due to the representations made by M. Demtchinsky, meteorologist, engineer, and landed proprietor, who, after contributing freely to the columns of the *Novoe Vremya*, was received in audience by the Czar. He spoke his mind freely as to the evil state of the country, and being asked to embody his views in writing, drew up a report in which he set forth with brutal frankness the defects of the existing system and expounded "a whole system of reform in three divisions. The result of all this was that von Plehwe was sent for, and ordered, in the first place, to get the manifesto ready, and then to organize various commissions to carry out the proposed reforms."

The manifesto, says the correspondent of the *Westminster Gazette*, was "meant to be a clear and concise statement of what the Czar wishes to do for the welfare of his people, and, as it issued from the hands of officials who had no intention of doing what they were told, it was tantamount to nothing, for what was given with the one hand was fully taken away by the other."

Dr. Dillon's Estimate.

Dr. E. J. Dillon contributes to the *Contemporary Review* a thoughtful and discriminating estimate of the manifesto. Dr. Dillon says:

"The instinctive impulses of Czar Nicholas II. are happy, humane, and seasonable, and in this they differ considerably from the deliberate and Penelopean acts of many of his advisers. With a keen eye on the trend of political affairs, he is ever on the alert for some generous idea, some practical measure which shall fire his subjects with social hope, and, by knitting their interests more closely together, weld all classes in one organic whole. The present manifesto is a striking case in point. It is evidently the product on the one hand of complex processes which have been at work in Russian society for fifteen years at least, as well as of economic and cultural changes the significance of which has not yet been fully gauged; and on the other, of the Czar's lively sensibility to these quickly shifting conditions, and of his sincere desire to bestow upon the one hundred and thirty-six millions of his subjects such breadth and fullness of national life as he honestly believes them capable of enjoying.

"The manifesto, which was promulgated on March 11, is the expression of a heartfelt wish

to satisfy the needs of the people, and the utterance of a reasonable hope that they will help him to solve the arduous problem. It may, consequently, be likened to a piece of white paper with a single text; and all criticism must needs be postponed until the essay on the text has been written. To speak of it as a Magna Charta of constitutionalism is premature and misleading.

WHAT THE MANIFESTO MEANS.

"This document is neither a Magna Charta nor a declaration of rights,—it is the expression of his majesty's intention to have the old-world forms, which the modern man even in Russia has outgrown, readjusted to latter-day requirements. Religion is, the Emperor rightly holds, the most solid groundwork of the nation's well-being; and recognizing the fact that religion is not identical with any particular church, he deems it expedient 'to strengthen the undeviating observance—by the authorities who have to do with matters of creed—of the principles of tolerance laid down by the fundamental laws of the Russian Empire, which, piously recognizing the orthodox church as chief and predominant, bestow upon all our subjects of other religions and upon all foreign communions freedom of belief and of worship according to their respective rights.' Few passages of the manifesto will evoke more heated discussion than this, but nothing could be gained by commenting at this early stage upon words of wisdom which possess no further meaning than that which future legislation on the subject will put into them.

THE QUESTION OF RELIGIOUS LIBERTY.

"One of the laws at present in force in the empire to which exception is widely taken deals with the religion of children one of whose parents is a member of the orthodox church, and prescribes that every such child shall be brought up as a member of that communion, even though both its parents desire to enroll it in another.

"Whether the manifesto will react upon that article of the penal code, it is, of course, impossible to foretell with certainty, but it would be rash to assume that the statute will be repealed. On the contrary, the position assigned to the orthodox church as 'chief and predominant' would appear meaningless without some such privileges which the others do not possess.

THE GERM OF FUTURE DEVELOPMENT.

"The changes in the organization of the village community which are foreshadowed in the manifesto are less likely to interest foreigners than those which fall within the sphere of religion or politics. But to the Russian peasant it

is a matter of supreme moment. One passage of the imperial proclamation deserves special notice. It is that which contains a promise that the agrarian laws will be revised, and that the schemes of improvement formulated will be discussed in provincial government councils 'with the closest collaboration of the worthiest public men invested with the confidence of the public.'

"If the manifesto mark, as many Russians hope and profess to believe, a new departure in domestic policy, the beginning of a new era of representative government, this promise, then, is assuredly the germ from which it will ultimately spring. Nor is there any good ground for doubting that the powers of the zemstvos will be somewhat extended, that a certain degree of influence upon agricultural legislation will be vouchsafed to them, and that the number of their members will be considerably increased. But it seems equally certain that a long time must elapse before all these reforms can be embodied in legislation. Moreover, whatever the nature of the concrete results the manifesto will finally bring forth, it may be unhesitatingly assumed that constitutional government, even in the mild form in which it is now pining away in central Europe, is not among the innovations contemplated by the Czar."

M. Leroy-Beaulieu's Views.

M. Anatole Leroy-Beaulieu, who writes in *La Revue* for March 1, is puzzled at the manifesto, as well he may be, seeing that he seems only to have at hand the inaccurate version first telegraphed to western Europe. For that reason also, he receives the manifesto, on the whole, sympathetically, and hopes that it will initiate the emancipation of the Russian conscience and the emancipation of the worker. He apparently regards the clause about religious tolerance as if it promised to change the law—which it did in translation, but not in the original, which as given above specifically states that the present law is good enough. Still, he calls the promise vague. One thing he sees nothing but good in if it is carried out, and that is the making of it easier for the peasant to release himself from the communal bonds. This, he says, would mean a great transformation for the empire.

Sir Henry Norman's Comment.

The editor of the English *World's Work* sees in the manifesto a dual influence:

"If the truth could be known—it seldom or never is known in Russia—it would probably be found that the first draft of the imperial utterance was far in advance of that which now sees the light. Nobody who has been in a position

to learn of the character and aspirations of the Czar will doubt for a moment that tolerance, sympathy, and enlightenment are the mainsprings of his latest action. Unfortunately other influences, against which even a Czar sometimes struggles in vain, have cast these lofty intentions into a mold which virtually obscures their character and objects."

"THE MACEDONIAN CLAIMANTS."

IT is a fact not generally understood in this country that the Greeks, in the present Macedonian crisis, are actually in sympathy with the Turks. Mr. William Miller, writing in the *Contemporary Review* on "The Macedonian Claimants," deals in particular with the Greeks and the Albanians, who have been rather left out of account by most writers.

"It is curious, if somewhat disheartening, to find that at Athens, at this moment, the Bulgarians, not the Turks, are regarded as the worst enemies of the national aspirations in Macedonia. No student of the Eastern question will be surprised at this sudden and kaleidoscopic change since the war of 1897. But well-meaning philanthropists who hope against hope and believe against history that all the Christian races of the East will join hands in a common crusade against the Turks will scarcely credit what is an undoubted fact. For some months past—in fact, ever since the Macedonian question became acute—the Greek press has been administering strong stimulants to the Sultan to send more troops to Macedonia along that self-same railway which, barely six years ago, the Bulgarians were loudly implored to cut, so that the advance of Edhem Pasha into Thessaly might be checked! Only a few days ago, I read a leading article in one of the chief Athenian journals in which Turkish outrages in Macedonia were denied, the recent atrocities narrated by the special correspondent of the *Daily News* were declared to be inventions, and the behavior of the Turkish troops was declared to have been better than that of many other nations would have been 'under similar provocation!'"

ALBANIA.

The Albanians, according to Professor Virchow, have the most intellectual skulls in Europe. According to Dr. Dillon, who deals with them in the later part of the review, they also have the toughest.

"In their love of bloodshed and horror or humdrum and laborious lives, they resemble the Kurds, and feel, like them, that they have a better right to exist and thrive than the inferior races, who are on earth merely for their sakes.

Vendetta and hospitality are the two tribal customs the strict observance of which makes the most profound impression on the foreigner. Not only do sanguinary feuds rage for generations between two tribes, but also between two families of the same tribe, and hundreds of persons are sacrificed at sight to propitiate the bloodthirsty shades of parents or forebears. It has been calculated that about 25 per cent. of the entire population die violent deaths. But the prospect has no terror for the Albanian, whose proverb expresses his feelings on the subject: 'Dying is a plague; but it is half a plague to live.' At times, large tracts of land are given over to these sanguinary encounters, and oddly enough, while any man passing there may be shot down by his enemy or the enemy of his tribe, a woman is allowed to go her way unmolested. Hospitality, too, is carried to extraordinary lengths, and the murderer of a man can trust his victim's family to spare his life once he has gained the shelter of their home."

KING CHRISTIAN IX. OF DENMARK.

KING CHRISTIAN IX. of Denmark, the Nestor among the monarchs of Europe, celebrated his eighty-fifth birthday on April 8, and Dr. A. von Wilke makes this an occasion for giving a short account of the King's reign, in a recent issue of *Die Woche*. King Christian is not a Dane by birth, but belongs to the house of Holstein, one of the two German princely families that have supplied nearly every European country with its rulers, the other one being the house of Coburg, to which King Edward belongs. King Christian, however, is related to the extinct Danish dynasty both on his mother's and his wife's side, and through the latter he succeeded to the throne of Denmark on the death of Friedrich VII., in 1863.

This reign of forty years has not been a quiet one. "There are few periods in the history of Denmark," says the writer, "marked by so many external and internal conflicts as the last four decades. At the very beginning, an unfortunate war deprived the country of two rich provinces [Schleswig and Holstein], reducing it to a smaller area than it had ever before covered, and deeply wounding and humiliating the pride of the people. And on the restoration of peace, the country was torn for years by political factions that have been harmonized only within a comparatively recent time. The King, siding with the minority of his subjects, was in open conflict with the parliamentary majority, and was more than once obliged to go to the extreme of dissolving the Chambers, in order to

carry out, with the aid of an unpopular ministry, the measures that he deemed best for the welfare of the country. And he finally had the satisfaction of seeing internal peace return in consequence of his persistence."



KING CHRISTIAN IX.

But while the factions were raging, and reviling one another, and an attempt was even made to assassinate the president of the ministry, the King personally was never attacked, for he disarmed all his opponents by a kindness toward individuals that has become the most prominent trait of his character. His popularity is further enhanced by the fact that he is a model husband and father, and is connected by family ties with the chief reigning houses of Europe, to the political advantage of the country; his wife, Queen Luise, who died four years ago, was facetiously called "the mother-in-law of Europe."

King Christian has six children, three of whom are numbered among the crowned heads of Europe,—his second son, who mounted the throne of Greece in 1863 as King George I.; his daughters, Alexandra, Queen of England, and Dagmar, Empress-Dowager of Russia, the mother of the present Czar Nicholas II. The King's numerous progeny of children, grandchildren, and great-grandchildren, who are scattered all over Europe, gather about him every summer in one or the other of his castles. Court etiquette is then thrown aside; royalty "is glad to be as men among men; they seek amusement in sports, as bathing, tennis, and automobiling, and brighten the declining years of their aged host by their presence and filial love."

SUBMARINE WARFARE.

LIEUT. G. E. ARMSTRONG, R.N., contributes an article to the April *Cornhill* upon the possibilities of submarine boats in wartime. England has nine submarines built and building, France fifty. Lieutenant Armstrong cites some cases in which the submarine has performed great exploits, and concludes that as their proper sphere is the defense of ports, they practically make a blockade impossible.

A SUBMARINE'S INVULNERABILITY.

Many devices have been invented for indicating the approach of a submarine, but even if detected what good does it do? The submarine only shows for from seven to fifteen seconds.

"Perhaps only those who have had actual experience of practice at sea with quick-firing and machine guns can properly appreciate the significance of these figures. In the first place the target which such a vessel presents, when awash, is about as difficult a one as could be imagined. Secondly, only 'direct hits' would be of any avail, and the chance of securing any of them in the short space of time at the disposal of the captains of guns would be extremely slight; and in saying this I think even the most ardent gunnery man will agree with me. Of course, any attempt to injure a submarine when submerged would be out of the question, owing to the resistance given by the water to even the heaviest projectiles, and the consequent deflection."

The periscope, however, is now so perfect that a submarine never needs to come to the surface before discharging a torpedo at all.

"So perfect is it, and so regular in its action is the depth-keeping apparatus of an efficient submarine, that the *Français*, for example, has run a course of eight miles under water with the periscope constantly one foot out of water. This means that the unfortunate gunners on board a ship which is being attacked would, under these circumstances, have a painted metal rod one foot long and three inches wide to fire at, at the distance of several hundred yards; and even if they accomplished a miracle by hitting it, they would hardly be better off than they were before."

Lieutenant Armstrong mentions that only a select few among British naval officers have any practical acquaintance with this new type of vessel. In fact, scarcely one officer in a hundred has ever even seen a submarine. The French, however, use every effort to acquaint their officers and men with all the aspects of submarine warfare. In the opinion of many officers, the whole principle of naval strategy

in wartime has undergone serious modification since the introduction of the submarine.

Essential Requirements.

Commander F. M. Barber, U.S.N., retired, writes in the current *Forum* on some of the technical details of the submarine torpedo boat which are of interest to the lay reader. The following, according to Commander Barber, are the essential points:

"1. The boat should be able to steer a course and perform the necessary operations; and apropos of this it will be remembered that water is 900 times as dense as air, but that it has been calculated by Bouger that we must go to a depth of 700 feet before it becomes absolutely opaque.

"2. The boat should have speed. The importance of this feature is accentuated and aggravated by the fact that, in consequence of the increased wetted surface, nearly double the power is required to get the same speed when under water that is obtained when the boat is running with half its body submerged.

"3. It should have a sufficient supply of air to support life for several hours or to have the means of purifying it—520 cubic inches of air per man per minute are required to support life—but in addition provision must be made for getting rid of the carbonic acid and animal impurities that are given off.

"4. The boat should be of sufficient displacement to carry machinery and crew and have space for them to operate.

"5. It should be of such form as to be easily propelled and steered.

"6. It must be able to rise and fall at will to a determined depth either when stationary or when in motion.

"7. The crew must be able to enter and leave the boat without external aid.

"8. The boat must be of sufficient strength to resist collapse, the pressure increasing at the rate of one-half pound to the foot as the boat goes down.

"9. Finally, and in addition to all the above, the boat must be properly armed in order to be certain to sink the enemy."

THE LATEST INVENTIONS.

Commander Barber describes several devices that have recently been adopted with a view to overcoming the inherent difficulties of submarine navigation:

"In the present state of the art, the boats are propelled on the surface by petroleum, gas, or alcohol engines, and under water by electric engines driven by storage batteries, which also supply the lights. Compressed air supplies breath-

ing, ejection of torpedoes, and ejecting water ballast when required. Air that has been breathed can be rendered reasonably respirable again by allowing it to bubble through water. But experiments are now being made by the French with a material called 'oxylithe,' a new chemical compound which liberates oxygen freely when mixed with water. This not only purifies the air, but it burns up all animal impurities. In addition, experiments are being made with a new motor to which oxylithe furnishes the fuel. If this proves successful, and the prospect is at present favorable, the motor will do for both surface and under-water running. Much more powerful machinery can be installed, a large part of the heavy electric batteries can be removed, and other advantages obtained; but, of course, all this will take time. One difficulty with electric accumulators has been the escape of explosive fumes; but the French have overcome this by covering them with wire-gauze boxes. In fact, there is finality in nothing. The situation of the submarine boat is very much like that of wireless telegraphy. It is yet new and has its defects; but all navies must have it even as it is, though every day sees new improvements.

"The impossibility of seeing under water to a great distance by any means yet discovered renders it necessary for a submarine to come to the surface occasionally on approaching an enemy in order to rectify the line of approach. To reduce the portion exposed to a minimum, a vertical tube a few feet in length containing reflecting mirrors is employed. It is called a periscope, and the end which appears on the surface resembles a bottle. Advantage was taken of this a short time ago to perpetrate an amusing ruse by floating a quantity of bottles out of the harbor of Cherbourg on the ebb tide. Calculating approximately on the time that they would reach some French armor-clads which were simulating a blockade, the submarines made their attack. The armor-clads were so confused by the bottles that they were all torpedoed by the submarines without ever being able to identify them."

The "Protector."

In *Page's Magazine* for April, Mr. Herbert C. Fyfe gives a short account of the *Protector*, which has recently been launched at Bridgeport, Conn. It differs chiefly from the *Holland* and other types of submarines in being able to run along on wheels upon the floor of the ocean. Traveling on the bottom is declared to be the most simple, safe, and reliable method known of under-water navigation. There are two wheels fitted to the keel, one in advance of the other.

They are three feet in diameter, with nine-inch face.

Our Navy Department is about to carry out a series of exhaustive trials with the *Protector*, and every one in authority seems to speak well of it.

THE COÖPERATION OF THE NAVY AND THE MERCHANT MARINE.

THE various ways in which the navy can further the interests of the merchant marine of a country are discussed by Georg Wislicenus in the *Deutsche Monatsschrift*. In time of war, it assumes the office of protector to the merchant vessels. "Any merchant marine," says the writer, "depends on the strength of the navy of its country. The great secret of all English success lies in the fact that the English navy always has been so well proportioned to the English merchant marine that foreign powers could never interfere with the latter. The boldest French pirates could never seriously cripple English trade, in spite of many single victories, because in all naval wars between England and France the English fleet retained mastery of the sea. To-day, as centuries ago, the protection of transatlantic trade and the merchant marine is the most important task of any independent navy that is not confined merely to coast defense; in order to achieve this task thoroughly, the enemy must be driven from the sea and blockaded in his ports, for then the merchant vessels of the other power are as safe on all seas as in time of peace. When the Union troops in the War of Secession had blockaded the entire coast of the Confederate States, the sea traffic, and with it the power of resistance, of those States was broken."

IN TIME OF PEACE.

In time of peace, also, the navy acts as protector, or a kind of police that enforces respect for the flag. The writer illustrates this by the case of Holland and England. "Holland's marvelously flourishing foreign trade in the seventeenth century declined almost simultaneously with the downfall of Dutch supremacy on the sea, while England owes its leading position in commerce chiefly to the auspicious coöperation of the navy with the merchant marine. Since the seventeenth century, the development of both has gone hand in hand to such extent as to outdistance all competitors. All the nations are so accustomed to seeing English men-of-war in all ports that gratuitous insults are hardly ever offered to the English flag. The feeling of security thereby engendered has been of incalculable benefit to English commerce."

THE HYDROGRAPHIC BUREAUS.

Another office of the navy is that of charting the seas, and here, again, the English navy has given material aid, not only to the English merchant marine, but to all seafarers in general; the hydrographic bureau of the English admiralty has issued nearly four thousand charts, and many guide books for mariners, that are used by vessels of all nations. "Other countries, also," the writer concludes, "recognize the value of these naval labors of peace, as is shown by the excellent work done by the French and American hydrographic bureaus; although they cover less ground than the British office, their work is frequently superior to the latter in regard to reliability and careful execution. The Russian hydrographic office, that is working on an extensive scale, is striving hard to become independent of English charts. Even the hydrographic offices of the smaller countries, as of Spain, Italy, Austria-Hungary, Holland, and Sweden, render valuable services to their merchant marine, though confining themselves mostly to their own coasts, leaving the survey of foreign coasts to England and France.

THE MULATTO IN THE NEGRO PROBLEM.

THE large part played by the mulatto factor in the American race problem is the subject of a suggestive article in the *May Atlantic Monthly* by Mr. Alfred H. Stone, of Greenville, Miss., who has studied the negro in the Yazoo-Mississippi Delta. Mr. Stone advances the thought that we have greatly underestimated the importance of the mulatto in the race problem. In fact, he thinks that were it not for the mulatto, there would be no race problem. He thinks it a matter of regret that the twelfth census did not attempt to enumerate separately the mulatto element. Mr. Stone points out that the people who have argued that the negro is capable of unlimited development, proving it by the achievements of individuals of his race, have really forgotten that these individuals were mulattoes, "from Murillo's favorite pupil down to Crispus Attucks, Benjamin Banneker, Douglass, Bruce, Lynch, the late Sir Conrad Reeves, Du Bois, Washington, Chesnut, and others."

THE REAL NEGRO IS CONTENTED.

Mr. Stone contends that when free from white or mulatto influence, the negro is of a contented, happy disposition. He is docile, tractable, and unambitious, with but few wants, and those easily satisfied. "He inclines to idleness, and though having a tendency to the commission of

petty crimes, is not malicious, and rarely cherishes hatred. He cares nothing for the 'sacred right of suffrage,' and when left to his own inclinations, will disfranchise himself by the thousand rather than pay an annual poll-tax. He infinitely prefers the freedom and privileges of a car of his own to the restraint of one in which he would be compelled to mingle with white people." As for the real negro,—the negro of the masses,—Mr. Stone thinks he presents few, if any, serious problems, and "none which he may not himself work out if let alone and given time. But it will be an individual rather than a race solution; the industrious will as children acquire a common-school education, and as adults will own property; those capable of higher things will find for themselves a field for the exercise of their talents, just as they are doing to-day; the vicious and shiftless will be as are the vicious and shiftless of other races."

WHERE THE COMPLAINTS COME FROM.

The complaints over "the lack of opportunities under which the negro labors," and the "injustice of race distinction," do not come, according to Mr. Stone, from the negro, but from the mulatto or white politician. "Through the medium of race papers and magazines, the pulpit, industrial and political gatherings and associations, the mulatto wields a tremendous influence over the negro. It is here that his importance as a factor in whatever problems may arise from the negro's presence in this country becomes manifest,—and the working out of such problems may be advanced or retarded, just as he wisely or unwisely plays the part which fate—or Providence—has assigned him. The negro, like the white man, responds more readily to bad influences than to good, and the example and precepts of a hundred men like Washington and Du Bois may be easily counteracted by the advice and influence of some of the very men of whom the mulatto type unfortunately furnishes too many examples.

THE GOOD AND THE BAD INFLUENCES.

"Booker Washington may in all sincerity preach the gospel of labor; he may teach his people, as a fundamental lesson, the cultivation of the friendship and esteem of the white man; he may point out the truth that for the negro the privilege of earning a dollar is of much greater importance than that of spending it at the white man's theater or hotel; yet all these lessons must fail of their fullest and best results so long as the negro's mind is being constantly poisoned with the radical teachings and destructive doctrines of the mulatto of the other school."

TRANSPORTING NEW YORK'S MILLIONS.

THE most difficult transit problem in the world, is Mr. W. W. Wheatly's characterization of the work of transporting New York's population, in an article in the May *World's Work*. It is not difficult to believe this phrase when it is considered that the New York street railways carry more passengers than all the other railroads in North and South America.

For practical purposes, the total metropolitan population at the beginning of 1903 is 4,500,000, the figure obtained by adding the three New Jersey counties just across the Hudson to the several boroughs of Greater New York. The annual average rate of increase is more than one hundred thousand, so that even allowing for some decrease in the annual rate during the next decade, the population of the year 1913 should be something more than six million people.

The surface and elevated roads of New York already carry twice as many people every year as all the steam railroads of the United States combined. Experts consider that with a population, ten years hence, of 6,000,000, and a possible daily passenger travel in the metropolitan district of 8,000,000, it is probable that the number of people seeking exit from the business district between 5 and 6 o'clock each evening will be 500,000, instead of half that number, as now. Thus, the gigantic transit plans for the metropolis must be undertaken in anticipation of possibly twice the present great demand on it.

WHERE THE REAL PROBLEM LIES.

"But the real problem of transit relief relates primarily to the lower end of Manhattan. With the exception of the few bridges and tunnels which deliver the east-and-west travel direct to the business district, it is certain that the swarms of people from the other bridges and tunnels will be thrown upon the local Manhattan lines for distribution. The travel from the Blackwell's Island bridge, the Pennsylvania-Long Island Railroad tunnel, and the New York and New Jersey tunnel, will be dumped upon the south-bound lines in the morning, and upon the north-bound lines in the evening, at the height of the rush hour."

WORK ALREADY CUT OUT FOR THE NEW ROADS.

It is expected that the four tracks in subway No. 1 will be crowded to the maximum limit as soon as operations begin. In this subway, 540 cars an hour will move in one direction, with perhaps 43,000 passengers seated and standing. Nine additional tracks are proposed by Engineer Parsons, but they are not yet authorized, and it will require from three to five years for their com-

pletion. In the meantime, the electrical development of the Hudson, Harlem, and Putnam divisions of the New York Central, and the main line of the New Haven road, for a distance of twenty to thirty-five miles to the northward, the building of the new Portchester road, the extension of the elevated and subway routes to various parts of the Bronx and Westchester, will make a further great increase in the number of long-distance passengers seeking through train service to and from the business districts. •

THE DEVELOPMENT OF LONG ISLAND.

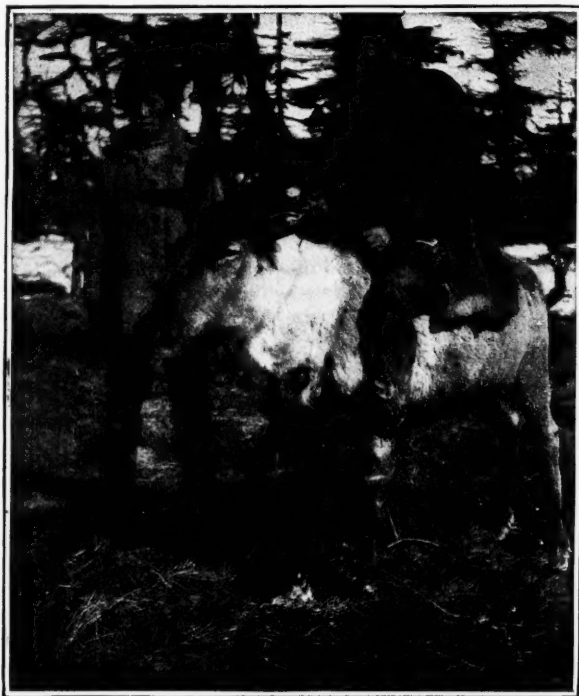
The additional bridges and tunnels pointing toward Long Island will be completed in 1907 or 1908. They provide for thirty tracks, where now there are but four. This enormous increase of facility in reaching Long Island will bring a tremendous movement toward that suburb of New York along the lines of least resistance. It looks as if there would be an immediate overflow toward Long Island of the hundreds of thousands now unwillingly crowded into the tenements and flat houses of Manhattan. It may be that a magnificent city on Long Island will grow up within a few years, to overshadow Manhattan and carry with it the center of population of Greater New York.

REINDEER IN ALASKA.

THE failure, a few days ago, of an attempt to bring reindeer from Lapland to Alaska has led some people to make the mistake of assuming that the Alaskan reindeer industry is no longer successful. That such a view of the situation is very far from the truth is clearly shown by Mr. Gilbert H. Grosvenor in the *National Geographic Magazine* for April. This writer says:

"Twelve years ago, Dr. Sheldon Jackson brought his first herd of sixteen reindeer across Bering Strait from Siberia and started his reindeer colony at Unalaska, off the bleak coast of Alaska. Many then smiled at the experiment and declared his plan for stocking the great barrens of northwestern Alaska with thousands of the animals which for centuries had been indispensable to the natives of Lapland and Siberia was impracticable and wasteful of time and good money. But the experiment prospered from the very first. Other reindeer, numbering nearly one thousand in all, during the succeeding years, were brought over from Siberia. Today, there are nearly six thousand head in the

various herds distributed along the Alaskan coast from Point Barrow to Bethel. The existence of the twenty thousand natives of northwestern Alaska, as well as the success of the miners who are beginning to throng into the interior of the territory in the far North, are



RIDING THE REINDEER IN SUMMER.

dependent upon these domestic reindeer; their clothing, their food, their transportation, their utensils, and their shelter are all furnished them by the reindeer.

"The reindeer enterprise is no longer an experiment, although still in its infancy. There are four hundred thousand square miles of barren tundra in Alaska where no horse, cow, sheep, or goat can find pasture; but everywhere on this vast expanse of frozen land the reindeer can find the long fibrous, white moss which is his food. There is plenty of room for ten million of these hardy animals. The time is coming when Alaska will have great reindeer ranches like the great cattle ranches of the Southwest, and they will be no less profitable."

REINDEER-RAISING AS AN INDUSTRY.

For the introduction into Alaska of domestic reindeer from Siberia, Congress has appropriated,

during the past ten years, \$158,000. In regard to the profits of reindeer-raising, Mr. Grosvenor says:

"A fawn during the first four years costs the owner less than \$1 a year. At the end of the four years, it will bring at the mines from \$50 to \$100 for its meat, or if trained to the sled or for the pack, is easily worth \$100 to \$150.

"The fawns are very healthy, and but few die; the does are prolific, and after they are two years of age add a fawn to the herd each year for ten years. Last year, out of fifty does two years and more of age in one herd, forty-eight had fawns, and of these only five died, three of which were lost through accidents or by the carelessness of the herder.

"The reindeer are so gregarious and timid that one herder can easily guard one thousand head. The herder knows that if a few stray off he need not look for them, as they will soon become frightened and rejoin the main herd.

"The does make almost as good sled deer as the bulls and geldings. They are slightly smaller and less enduring.

"The Chukchee deer cost, in Siberia, about \$4 a head for a full-grown doe or bull. The fawns born in Alaska are larger and heavier than the parent stock. The Tunguse deer cost nearly \$7.50 apiece. By the addition of the Tunguse breed, it is hoped that the Alaska stock will be improved and toughened.

"The reindeer cow gives about one teacupful of very rich milk, nearly as thick as the best cream, and making delicious cheese. Mixed with a little water, the milk forms a refreshing drink. The Siberians and Laplanders save the blood of slaughtered deer and serve it in powdered form. From the sinews, tough thread is obtained."

In concluding his article, Mr. Grosvenor gives this optimistic picture of the Alaskan reindeer's prospects:

"Even if no more reindeer are imported from Siberia, if the present rate of increase continues, doubling every three years—and there is no reason why it should not—within less than twenty-five years there will be at least one million domestic reindeer in Alaska. This is a conservative estimate, and allows for the deer that die from natural causes and for the many that will be slaughtered for food. In thirty-five years, the number may reach nearly ten million head, and Alaska will be shipping each year to the United States anywhere from five hundred thousand to one million reindeer carcasses and thousands of tons of delicious hams and tongues. At no distant day, it may be safely predicted, long reindeer trains from arctic and subarctic

Alaska will roll into Seattle and our most western cities like the great cattle trains that now every hour thunder into the yards of Chicago."

THE CHUKCHEE REINDEER-RAISERS OF SIBERIA.

A CURIOUS tribe of people dwelling in the far North was discovered by Mr. Waldemar Bogoras, of the American Museum of Natural History, in his journey to northeastern Asia in behalf of the Jesup North Pacific Expedition, and these Chukchee are described in the May number of *Harper's Magazine*. The pictures of the Siberian natives show a strong likeness to the American Eskimo, with much more decided Mongolian traits of physiognomy. The explorer says that the country he traversed two years ago, on this expedition, in northeastern Siberia, and three hundred miles from the shore of Bering Sea, has never before been visited by white men. After a terrible nineteen days' journey inland from the Pacific Ocean, the writer and his guides came upon a Chukchee village, and were entertained with the delicacies of the season, which happened to be frozen meat pounded fine and mixed with tallow, raw kidneys cut in thin slices, bone marrow, and other northern dainties. The party sat on thick skins and feasted surrounded by the whole population of the camp.

The Chukchee show marked differences from the other tribes of Asia, and in their customs and beliefs bear strong resemblance both to the American Eskimo and to the Indians of our northeastern shore.

This wild country, twice as big as the whole German Empire, has a population of about twenty thousand only, of reindeer-raisers.

"The Chukchee are a fierce, warlike tribe. Two centuries ago, in wars with Cossack invaders, they held their ground to the last. When taken captive, they would end their own lives; and women would kill their children and burn themselves in their tents rather than fall into the hands of the victors. At last, in the middle of the eighteenth century, large bodies of Chukchee warriors twice succeeded in heavily defeating strong Cossack parties, whose chiefs were killed, or taken captive and afterward slowly tortured to death. Then the Russian Government, tired with useless wars, ordered hostilities to cease; and since that time the Chukchee reindeer-breeders have lived unmolested in the middle of their desolate barren tundra.

"Much of their fierceness, however, is still retained at the present time. Murders are frequent, and they are followed by continual acts

of blood-revenge, unless the relatives of the first murderer speedily dispose of him themselves, and thus remove the cause of strife. Cases of suicide are hardly less numerous, because even very young people are quite reckless of their own lives, and when thwarted in their purpose will destroy themselves from anger or spite, jealousy or unassuaged desire. Persons suffering from some incurable illness, and especially old men and women weakened with age, often proclaim their wish to be killed by their nearest relatives. Then the sons or the nephews, who otherwise are kind and dutiful to their elders, feel themselves bound to comply, however unwillingly, with the request. No retraction is permissible, since such an announcement is considered as a promise of human sacrifice to the evil spirits. If taken back, the revenge of the spirits on the whole family will be incurred."

PROSPEROUS CANADA.

THE migration, within the past year or two, of thousands of substantial American citizens to the fertile lands beyond our northern border adds a new element of interest to such a survey of Canadian affairs as Mr. Erastus Wiman contributes to the *North American Review* for April. Optimistic, Mr. Wiman certainly is, as regards Canada's commercial and industrial future. He shows from the reports of the Dominion Department of Trade and Commerce that the aggregate foreign trade of the country was 91 per cent. greater in 1902 than in 1895, and that the total trade showed a gain of over \$70 *per capita*. In the meantime, certain Canadian articles, like cheese, have taken a high place in the foreign markets because of their excellence, and are likely to maintain their prestige permanently. Mr. Wiman favors a zollverein arrangement between the United States and Canada.

AREA COMPARED WITH THAT OF THE UNITED STATES.

Mr. Wiman says that annexation to the United States is unpopular and disapproved in Canada, not because the Canadians love the Yankees less, but because they love themselves more and propose to develop their own country in their own way. Americans do not always fully realize that Canada comprises more space on the earth's surface than all the States of the Union taken together. "It is not only the larger of the two countries, but, because of its enormous volume of minerals, and, specially, because of its food-producing lands, it is believed by Canadians to be the richer. Omitting the possessions of both

countries in Alaska, Canada has five hundred thousand square miles more of land available than the United States; besides, it has more than half the fresh water of the globe within its borders and within its control—a fact of supreme importance, as will be seen later on, when its geographical location and the grades of its rivers are realized. This five hundred thousand square miles of land comprises Northwest Canada, rendered available within the last twenty years through the operations of the Canadian Pacific Railway, which has made all Canada accessible."

GRAIN-GROWING, MINING, AND MANUFACTURING.

We have lately heard a great deal in the United States about the wheat-growing possibilities of Northwest Canada. The future of this industry is still somewhat problematic, but Mr. Wiman shows that Canada has at least one distinct advantage, as a grain-grower, over her competitors,—namely, a system of cheap and ready transportation to the seaboard.

Another important element of wealth in Canada is her paper pulp-wood. The area covered by this timber extends from the interior of Labrador, Newfoundland, and Nova Scotia west and northwest to Alaska, north of the St. Lawrence valley and the prairie sections, almost up to the Arctic Circle, and is estimated to comprise 450,000,000 acres. The entire region is probably better supplied with water power than any equivalent area on the earth's surface. This latter fact has especial significance in connection with the manufacture of paper, and the power plants already established, described in a recent number of the *REVIEW OF REVIEWS*, seem to indicate a rapid development of manufacturing enterprises.

As to Canada's mineral resources, Mr. Wiman says:

"Rich ores of iron abound all the way from the Pacific to the Atlantic. Among many localities, may be mentioned Texada Island, between Vancouver Island and the mainland; several places along the Crow's Nest line of the Canadian Pacific Railway system; the Atikokan district, about seventy miles west of Thunder Bay; the Iron Lake, Frances, and Helen hematite mines near the northeastern angle of Lake Superior, extensive deposits of rich ores in various parts of the country between Lake Ontario and the Ottawa River, and in the valley of this stream; besides many others of different kinds of iron ore in the provinces of Quebec and Nova Scotia, and on the east side of Hudson Bay and in the Labrador peninsula (which is one thousand miles across).

"Canada possesses coal enough to supply the

world. Although the limits of her enormous coal fields in the Northwest Territories, and in the mountainous country extending from the State of Washington to beyond the Arctic Circle, have not yet been accurately defined, they probably exceed those of the United States, and consequently of any other country in the world. It is a remarkable and important fact that, while the United States possesses no coal fields on the shores of either ocean, Canada has rich mines capable of great development at tidewater in Nova Scotia on the Atlantic and on Vancouver Island on the Pacific."

The Dominion Geological Survey has reported as follows on the mineral wealth of the country :

"Almost every mineral and metal known can be found in Canada, and a number of the most valuable products exist here in quantities not exceeded anywhere else in the world ; take, for instance, the metals iron, copper, lead, nickel, gold, silver, zinc, manganese, and the non-metallic minerals, coal, petroleum, natural gas, salt, corundum, asbestos, gypsum, cements, phosphates, mica, slate, etc."

SOUTHERN COTTON MILL COMMUNITIES.

THE defeat of the child-labor bill in the Georgia Legislature has caused an impression to prevail in the North that the situation, so far as Southern factory conditions are concerned, is well-nigh hopeless. An article by Mrs. Leonora Beck Ellis in the *American Journal of Sociology* for March should go far to remove such an impression, since it brings clearly into view certain distinctly favorable aspects of Southern factory life which have received scant attention from most writers on the subject.

ECONOMIC OBJECTIONS TO CHILD LABOR.

It is evident, in the first place, that practical considerations are operating very effectively against the system of child labor in cotton mills, in the South as well as elsewhere.

"Manufacturers in this part of the country, as in Massachusetts or Illinois, are learning the lesson that it is a false economy, with expensive practical as well as ethical results, which prompts the employment of the low-priced labor of children. Delicate machinery operated at high speed demands more intelligent and steadfast attention, to secure the best results, than untaught and usually careless childhood can give it. The direct loss thus involved counts heavily in the course of a year, and comes to be weighed comparatively as the adult labor of a section grows more skillful and satisfactory ; nor are clear-headed mill men slow to discover that such loss,

estimated closely, is by no means compensated for by the low scale of wages to the child operative."

As a matter of fact, a recent report of the North Carolina Labor Commission shows that, while in 1895 there were 6,046 children employed in the factories of that State, in 1899 there were only 3,308—a decrease of 50 per cent. in four years, although during this same period there was an increase of 50 per cent. in the number of women and 100 per cent. in the number of men similarly employed, to meet an increase of nearly 40 per cent. in the number of spindles. These facts tend to justify, in a measure, the optimistic conclusion reached by Mrs. Ellis, that child labor in factories is a rapidly vanishing evil.

From this conclusion, Mrs. Ellis passes on to a study of the homes and the family life of the mill operatives throughout the new manufacturing South.

A RURAL PEOPLE.

Among the points of difference between the factory operatives of the South and those of other sections, Mrs. Ellis notes, first, the absence of "urban instincts" in the Southern communities. The good and the bad in these mill workers, she says, are still such qualities as belong to a strictly rural people ; but with the passing of the present generation this characteristic must be largely lost.

"It may be asked : What are the indications of this quality which, for lack of a better word, is named 'rusticity' ? The signs are many and easy to read. No observant person can miss the plain evidence even in his first day with the mill people. He walks past the cottages row on row, and sees prince's feather and bachelor's button growing in the tiny yards, patchwork quilts sunning from the windows, and strings of red pepper festooned on the back porch. The boys are quite often chewing tobacco, but they are not smoking cigarettes. Often, alas ! the girls dip snuff, but they do not lace in their waists nor attempt handkerchief flirtations. The women are given to quiet, and a profound reserve usually marks their social intercourse. The festive gatherings in the 'amusement halls' on Saturday nights are either stiff parties or genuine country dances. The 'barbecue' is common on a general holiday, and the 'all-day singing' of a Sunday still remains the acme of enjoyment affording the perfect blending of sociality and devotion.

NATIVE AMERICANS.

"A second quality differentiating our people from the Northern factory communities of to-day is what may well be called their unmodified

Americanism. Up to the present time, there is an entire absence of the foreign element of population among them, and the effect of such absence is very marked. Not only do better manners prevail in this people sprung from our own soil, but better morals, greater social purity, less turbulence and lawlessness. Observance of law is easier, more natural, even to illiterate Americans, than to other nations, because law has typified to them from childhood the majesty of right, not the tyranny of might.

"The finer respect for women which marks American manhood extends also to these toilers. Except among their very lowest, motherhood inspires the regard it meets in other social classes."

THE LACK OF THRIFT.

Most of the Southern mill operatives come from the class known in the South as tenant farmers,—a moneyless people,—and Mrs. Ellis accounts for the apparent extravagance and thriftlessness of these people on the score of their derivation. The money that they now receive every Saturday night is far more than many of them formerly saw from year's end to year's end.

"Cases such as the following are multiplied many times over: The father, mother, and six or eight boys and girls (for large families are the rule in this class), ranging from twelve to twenty-odd years of age, are at work in one mill. The adults, if fair weavers, easily average \$22 each per month; the younger members of the family are probably spinners, and average about \$14 each per month. This family, then, that in the old life of the farm thought themselves fortunate, indeed, to handle \$100 in cash throughout a year, now bring home something like \$175 every month. Is it strange that extravagance seizes upon this metamorphosed household?"

LOW COST OF LIVING.

"How can they save money? clamor those who have been studying the comparative wage-scale of Northern and Southern factories without acquaintance with the actual conditions of the latter. By reasonable economy, is the answer here as elsewhere. From \$20 to \$30 per month is paid good weavers throughout this section, while the average spinner draws from \$10 to \$16; and these are regarded as good living wages in a country where the prices of necessities range much lower than in the East or the West. Houses are to be heated only about four months of the year, and fuel is cheap,—in many places less than \$1.50 per cord for wood and \$2 to \$4 per ton for coal. Clothing costs far less in this warm climate than in a cold one.

Farm and garden supplies are bought for what seems to the Northern mind an absurdly low price, and dairy products are never high. Besides, in all the rural mill communities, which are now counted by the score to every one in a city, a garden patch always, and often pasturage for one cow, can be counted on with every cottage.

"House rent is not a considerable item. The mill cottages rent by the month on the basis of 60 cents to \$1 per room, and they range in size from three to eight rooms, four, however, being the rule. With few exceptions, these cottages are fairly comfortable and built with a view to good sanitation. Outside of cities, each one has its ground space where the inmates may grow flowers and vegetables, thus fostering a form of local attachment that is by no means weak."

OHIO AND MISSISSIPPI FLOODS.

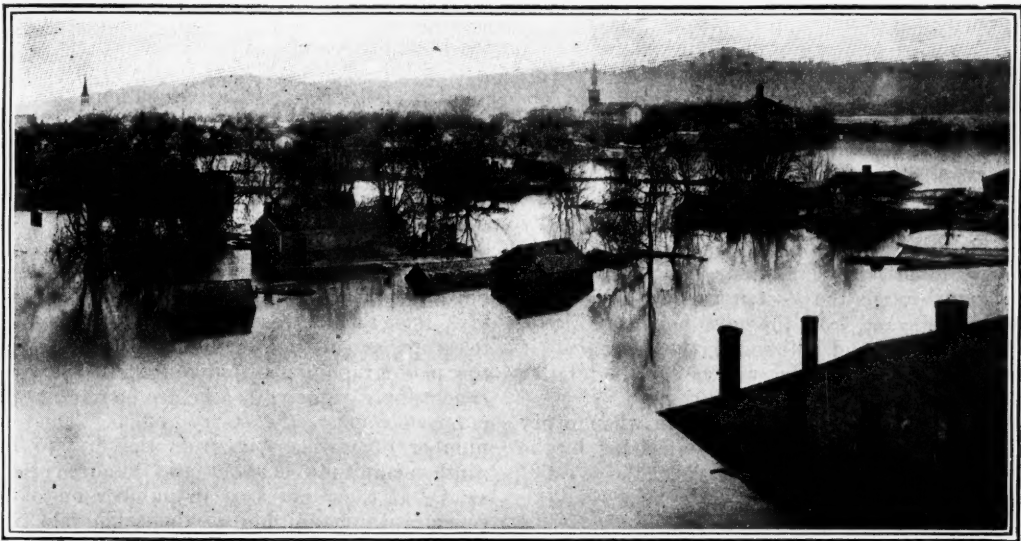
THE high water of the present spring in the Ohio and Mississippi valleys has occasioned no little discussion of the causes of these river floods, and some interesting comparisons have been made with the flood conditions of former years. In *Arbiculture* (Chicago) for March some of the striking features of these annual freshets are pictured and explained for the benefit of the reader who is unfamiliar with the peculiarities of our great Western waterways.

The first recorded flood in the Ohio River was in February, 1832. It resulted from a sudden rise of temperature, with heavy rains, following an unusually heavy snowfall throughout the Ohio valley. The river rose to the height—then unprecedented—of 64 feet 3 inches. Similar conditions produced another high-water record—63 feet 7 inches—in December, 1847. In February, 1884, the river attained a still greater depth at Cincinnati—71 feet and three-fourths of an inch. That was the highest water ever known at Cincinnati.

WIDENING THE RIVER-BED.

To realize the fact that the volume of water flowing away within a given period is far greater now than in former times, when the forest areas were greater, it is only necessary to remember that the width of the Ohio River bed has been increased with every overflow by the caving in of farms along its course, so that to-day the width between the banks is estimated as one-fourth greater than it was in 1832.

The writer of the article in *Arbiculture* was acquainted in boyhood with the river roads on which the traffic between towns and farms along the Ohio passed. He says:



FLOOD SCENE AT LAWRENCEBURG, IND., ON THE OHIO RIVER, JUST BELOW THE MOUTHS OF THE MIAMI AND WHITE WATER.

"These roads were washed into the river and conveyed down the stream year after year with each recurrence of high water, the fences carried away, adjoining farms were swept into the whirling water, acres at a time were thus lost by the landowners along the banks. One house with which the writer was familiar was moved back from the river-bank four successive times, each time being taken several hundred feet to a supposedly safe location. It was finally removed half a mile back and the roadway changed to a similar distance.

"Meantime, there was not, as is sometimes the case, any deposit upon the opposite side of the river, but the breadth of the waterway was increased each year, and is now twelve hundred feet broader than it was seventy-one years ago, at time of the highest water of early days.

LOW WATER A MODERN CONDITION. +

"But it is by no means the highest water only which is to be regretted on account of removal of the forest. During the long period of drought which follows, the springs having been dried up, the streams run low and the period of extreme low water in which navigation is suspended or made very difficult is greatly prolonged.

"Prior to 1862, there was no time within the knowledge of steamboat men of the forties and fifties when the rivers of the West did not have a good boating stage, usually twelve or fifteen feet depth, while in more recent years, the water has been so low that teams were crossing the Ohio by fording, the water being but two feet

depth, all steamboats and crafts of every kind being idle for months at a time.

"Many cities are dependent for water-supply on the various streams, and during the low-water stages the contamination is far more serious, the impurities being concentrated to such extent as to cause much sickness. Of course, with all sewerage of cities polluting the streams, this becomes a serious matter when the water for a long time remains so low."

MILLIONS FOR LEVEES AND DAMS.

This writer describes the great floods of 1883 and 1884, when much damage was done and untold suffering caused throughout the Ohio and lower Mississippi valleys. In the present year, however, the water at Memphis has reached a higher stage than in previous flood years—40 feet—while at New Orleans also it has exceeded all records. Speaking of the lower Mississippi valley, from the junction with the Ohio to the delta, the writer says:

"In 1897, there were 15,800 square miles of this alluvial plain beneath the sea of waters; 380,000 people were residents of the flooded area; 39,500 farms were submerged, with 3,800,000 acres of farm land.

"Millions of dollars have been expended by the Government and the several States of the South in constructing levees, as in high water the Mississippi is far higher than the surrounding lands.

"Other millions have been used in damming up the outlets to this great river, in order to

maintain a navigable stage through the bar at the principal estuary.

"Here are two opposing conditions for which money has been lavishly expended,—levees to hold the waters in a confined channel, and obstructions at the river's outlets which must necessarily prevent a rapid disposition of the flood waters.

"When to these overflowing streams of the eastern watershed there come from the Rocky Mountains the melting snows and from Texas and Colorado the cloudbursts, which frequently occurs, through the Arkansas, Red, and Canadian rivers, and from the more northerly Plate, Yellowstone, and Missouri, the antagonistic works of man must give way before the terrible influences of nature.

"But why all this waste of rain when every drop that falls as rain or snow is needed by the growing population of the States of the West ?

THE USES OF FORESTS.

"By a systematic reforestation of the mountain regions and the planting of trees on the plains at headwaters of these Western rivers, and the construction of extensive storage reservoirs to supply water for irrigation, this country must be vastly improved in agriculture, manufactures benefited by water power, and navigation improved by a regularity of flow in various streams ; a recurrence of such disastrous floods in the South would be impossible, as, relieved of the surplus water of the Western streams, which back up and retard the flow of the great Mississippi, the Ohio would be fully competent to carry away the waters of its drainage area. And with a proper systematic reforestation of the Alleghany and eastern mountains, and the broken lands along the various streams, the forces of nature could be easily overcome and the nation be forever benefited."

IS MAN THE CENTER OF THE UNIVERSE?

ARE we going to come back to the old familiar theory of the universe, according to which Man was the center of all creation, the sun, the moon, and the stars being the convenient street lamps created for his convenience? The discovery of the immensity of this sidereal universe led to the belittling of the importance of man. We seemed to become as insignificant as cheese-mites seated upon one of the minor planets in a universe which contained one hundred million worlds. "What is man that thou art mindful of him?" was the inquiry which gained in force with every improvement of the telescope. As system after system was revealed, each fresh

discovery seemed to make more utterly unthinkable the old theory which had its expression in the Book of Genesis. But now an article which Alfred Russel Wallace contributes to the March number of the *Fortnightly* gives us hope that our good conceit of ourselves is about to be revived, and that we are going to come back to the old faith by the very latest and most approved scientific road. For if Dr. Wallace is correct,* there is a strong presumption that we are after all the center of the whole universe.

He maintains that there is no reason to believe that the stars are infinite in number. He says that the increased size and power of the telescope, and that powerful engine of research, the photographic plate, alike lead to the same conclusion,—namely, that we are piercing to the outer elements of the starry system. The total number of visible stars from the first to the ninth magnitude is about two hundred thousand. If they increased in number on to the seventeenth magnitude at the same rate that they increased from the first to the ninth, there ought to be 1,400,000,000 stars visible through the best telescope, instead of which there are not more than 100,000,000. As our instruments reach farther and farther into space they find a continuous diminution in the number of stars, thus indicating the approach of the outer elements of the stellar universe. If the universe is not infinite, but has limits, where is its center? He says that the new astronomy has led us to the conclusion that our sun is one of the central orbs of a globular star cluster, and that this star cluster occupies a nearly central position of the exact plane of the Milky Way. Combining these two conclusions, Dr. Wallace states definitely that our sun is thus shown to occupy a position very near to, if not actually at the center of, the whole visible universe, and therefore in all probability is the center of the whole material universe. This conclusion, he maintains, has been arrived at gradually and legitimately by means of a vast mass of precise measurements and observation by wholly unprejudiced workers.

Not only are we the hub of the universe, but Dr. Wallace thinks that there is grave reason to doubt whether life could have originated and have been developed upon any other planet. It was necessary that for hundreds of millions of years the surface temperature should never for any considerable time fall below freezing-point or rise above boiling-point. None of the other planets appear to possess this and other fundamental features which have made life possible on the earth. Among these features, he maintains that the importance of volcanoes and deserts has never been properly appreciated.

Without volcanoes and without deserts, we should not have had that uninterrupted supply of atmospheric dust without which the earth would have been uninhabitable by men. Our position, therefore, without the solar system is as central and unique as that of our sun in the whole starry universe. He sums up his conclusions as follows:

"The three startling facts—that we *are* in the center of a cluster of suns, and that that cluster *is* situated not only precisely in the *plane* of the Galaxy, but also *centrally* in that plane, can hardly now be looked upon as chance coincidences without any significance in relation to the culminating fact that the planet so situated has developed humanity.

"Of course, the relation here pointed out *may* be a true relation of cause and effect, and yet have arisen as the result of one in a thousand million chances occurring during almost infinite time. But, on the other hand, those thinkers may be right who, holding that the universe is a manifestation of mind, and that the orderly development of living souls supplies an adequate reason why such a universe should have been called into existence, believe that we ourselves are its sole and sufficient result, and that nowhere else than near the central position in the universe which we occupy could that result have been attained."

If Dr. Wallace be right, it is obvious what an important bearing his conclusion will have upon the whole field of theological thought.

An Opposing View.

It is said that Dr. Wallace is at present engaged in writing a book in which he will elaborate the thesis advanced in his *Fortnightly* article. Meantime, Prof. H. H. Turner, of Oxford, offers a reply in the April number; and it must be admitted that he puts a very different light upon Dr. Wallace's arguments. As regards the existence of life on other planets, Mr. Turner sums up Dr. Wallace's argument as follows:

"Life is impossible at the uttermost boundaries of the universe. Therefore, it is only possible at the exact center."

But even if we are at the center of the universe, which Mr. Turner does not admit, he maintains that we are there only temporarily and accidentally. The solar system is moving through space at a rate which would take us to Sirius in one hundred thousand years, if we happened to be moving that way. In the fifty million or one hundred million years during which this earth has been inhabited, we must have passed thousands of stars, and other stars must have held the position before. If the

universe is as finite as Dr. Wallace argues, we should have traversed it from boundary to boundary in that time. Professor Turner, however, does not admit that the apparent thinning out of the stars at what Dr. Wallace considers the borders of the universe proves that the universe is finite. There are everywhere dark stars and dark nebulae which obstruct light, and therefore the fact that no stars can be perceived beyond certain limits proves nothing. Finally, we are not even temporarily at the center of the universe. The universe, as known, is like a saucepan—we may be at the center of the bowl, but not at the center of the bowl and handle taken together.

THE COMING TELESCOPE.

IN the May *Harper's*, there is an account by Prof. G. W. Ritchey of "Photographing the Nebulae with Reflecting Telescopes" which gives a most surprising idea of the feats of the astronomical photographer, when it is considered that the camera has been seriously used in astronomy for only about twenty years, although the first work of photographing the moon was done forty years ago by Draper. This writer gives some very interesting information as to the possibilities of building much larger telescopes than now exist. The largest ever constructed was Lord Rosse's, of six feet in diameter. This was sixty years ago, and nowadays modern reflecting telescopes one foot in diameter will give photographs more distinct and brilliant than Lord Rosse could obtain.

GREAT MIRRORS NOW POSSIBLE.

When this is said, Professor Ritchey's further statements become all the more interesting. He says no *great* telescope now exists, and that it is entirely possible now to construct a great reflector with even more than the refinement of the instrument in the Yerkes Observatory. "In the optical shop of the Yerkes Observatory is the nearly finished mirror for a reflecting telescope of five feet aperture. Two years' work has already been done upon this glass by the writer. The rough disk for this mirror was cast at the glass-works of St. Gobain, near Paris. It is five feet in diameter, is eight inches thick, and weighs a ton. No serious difficulties have been encountered in making this mirror, and there can be not the slightest doubt that an eight-foot mirror could now be made which would be as perfect in all respects as the mirror of the two-foot reflector which we are now using in photography. The French makers of the rough disks of glass have recently expressed their readiness

to undertake for us a ten-foot disk, one foot thick, which they think would be as homogeneous, as well annealed, and as perfect in all respects as the five-foot disk.

"I do not advocate mere bigness. In order that the improvement in the photographs obtained with a great reflecting telescope shall be proportional to the increase of size, all parts of the instrument must be made with the utmost care and skill; with all of the perfection made possible by modern engineering and mechanical methods, and by the latest improvements in glass-making and in optical work.

REFLECTING AND REFRACTING INSTRUMENTS.

"Some idea of the compactness, the rigidity, and the economy of construction possible in the mounting of a great reflector can be gained when I state that the tube of a reflector of eight feet aperture would be less than forty feet long,—twenty-three feet shorter than the tube of the forty-inch Yerkes refractor—and that the diameter of the dome required for such a great reflector would be eighty feet,—ten feet less than that of the dome of the forty-inch refractor. The cost of an eight-foot reflector, constructed with the greatest economy and simplicity, and yet with the utmost refinement, for use in photography, together with the cost of the dome, would be little, if any, greater than that of the Yerkes refractor with its dome.

WHAT WE COULD SEE WITH AN EIGHT-FOOT REFLECTOR.

"Judging from the results obtained with the two-foot instrument, an eight-foot reflector, if used in a climate where atmospheric conditions are fine, would photograph stars which are fifty times fainter than the faintest stars which can be seen with the largest modern refractors. This means that such a reflector would enable us to penetrate seven times farther into space than can now be done with the greatest visual telescopes, and therefore that such an instrument would reveal to us a universe seven times seven times seven—more than three hundred—times greater than the universe which is revealed by the most powerful modern refractors.

"Such a great reflector would give us photographs of the nebulae of about five times the scale of the photographs obtained with the two-foot reflector; the delicate structure and minute details of these wonderful objects would be shown proportionately better, provided that the instrument were used in a suitable climate. I know of no opportunity which has ever been presented in the entire history of astronomy greater than that which now awaits us in the

construction of a large modern reflector and its use in astronomical photography. We are accustomed to think of the construction of such a great telescope as an enormous undertaking; and yet the cost of an eight-foot reflector would be about one-twentieth that of a great modern office building or a modern battleship. How insignificant does even such a telescope appear when we think of the inconceivable depths of space which we are trying to penetrate; of the great works of the Creator which we are trying to study; of the problem of the development, the evolution, of suns and worlds which we are endeavoring to solve."

WHAT SCIENCE HAS FOUND OUT ABOUT THE BRAIN.

"THE Mechanism of the Brain" is the title of an article in the May *Harper's* by Mr. Carl Snyder, who reports the latest discoveries and hypotheses of our scientists in regard to the composition and function of that organ. For half a century, the scientific world has recognized that the vital part of the brain and the nerves seems to be highly phosphorized fat, and that without the phosphorus, this fat does not seem to think. Mr. Snyder pithily says: "Whether it be the brain-cell of a glowworm, or one trembling with the harmonies of 'Tristan und Isolde,' the stuff it is made of is much the same; it is a difference of structure, apparently, rather than of material. And the chemical difference between a brain or nerve cell and that of the muscles or the skin seems reducible mainly to a difference in the proportion of two substances,—water and phosphorus. Lean beef, for example, is from 70 to 80 per cent. water; the brain is from 90 to 95 per cent. water. And a brain or nerve cell may contain from five to ten times as much phosphorus as, let us say, the cells of the liver or the heart. The actual quantity is, of course, extremely small,—by weight, but a fraction of 1 per cent."

THE SIZE OF THE HUMAN BRAIN.

The brain of the average man weighs about three pounds. There is more of the phosphorized fat down the spinal column, and little plexuses all over the body, wherever a group of muscles are to be moved; and others still, the sensory or feeling nerves, which are everywhere. This nervous substance is made up of distinctly separated units, most of them extremely minute, though some attain a length of two or three feet. "The cells which run from the small of the back down into your toes are the longest. Those of the brain are mostly so small as to tax the powers

of the microscope." One scientist estimates the number of brain-cells at 1,600,000,000.

"Of course, the number varies enormously, for the size and weight of the normal brain vary greatly. The size of the brains of comparatively few distinguished men is known, and most published figures are worthless. The list given below is authoritative, and speaks for itself. The sizes are given in cubic centimeters :

Average human brain, 1,400 ccm. (49 oz. av.).

Dr. Dollinger.....	1,207	Agassiz.....	1,512
Harless.....	1,238	Thackeray.....	1,644
Gambetta.....	1,294	Schiller.....	1,781
Liebig.....	1,352	Cuvier.....	1,829
Birchhoff.....	1,452	Turgeneff.....	2,012
Broca.....	1,485	Byron.....	2,238
Gauss.....	1,492		

"It will be seen that Byron, who was commonly supposed to have a small head, is highest in the list ; and whatever may be thought of his poetry, certainly he was a man of rather mediocre intellectual attainments, as poets generally are ; while Baron Liebig, who possessed one of the best-equipped brains of the first half-century, was below the average."

HOW THE NERVE WAVES TRAVEL.

"Quick as thought" is not very quick. While a light wave would travel seven times around the equator in a second, a nerve wave makes only about a hundred feet a second. Just what this nerve wave is puzzles the scientific men. As there is no nerve action without the evident presence of electricity, it seems probable that nerve action, thought, and consciousness, and what in our present ignorance we call electricity, are one and the same.

PROFESSOR MATHEWS' EXPERIMENTS.

"This view gained heavy reinforcements a year ago from some brilliant experiments of Prof. Albert P. Mathews, who had been working on nerve-stimulation with Prof. Jacques Loeb in the University of Chicago. Professor Loeb, and others, had shown that in certain salt solutions an excised heart could be kept beating for hours ; further, that a piece of ordinary frog's muscle, for example, dipped in the same solutions, would beat rhythmically, like a heart.

"Professor Mathews took a step further. Instead of cutting away the nerves from the muscles, he left them joined at one end, merely separating the nerve enough to let the end of it hang in a cup of salt solution, while the frog's legs were suspended on a frame. The rhythmic beat began in a short time, just as if the muscles themselves were in the salt bath. Plainly, the nerve carried the stimulus, and, so far as any mortal could see, the stimulus was the same

as that which makes a live frog's muscles contract when it jumps. Whence came this stimulus ?

"The only solutions which give this effect are those capable of generating a current of electricity. A succession of electrical impulses, from a dynamo, for example, will make the frog's leg's twitch rhythmically, just as do these electrical solutions."

ENGLAND'S NEED OF UNIVERSITIES.

NOW and then is heard in England a demand for more and cheaper universities. Not more Oxfords and Cambridges, but institutions which make adequate provision for complete intellectual training and professional instruction, cheap and easily accessible for every boy or girl destined for a brain-working occupation. In the *Cornhill Magazine* for April, Mr. Sidney Webb argues convincingly on this line.

A HUMILIATING COMPARISON.

"The proportion of university students is going up in Holland and the United States at the rate of 5 per cent. per annum ; in Germany and Belgium, by 6 per cent. ; in Switzerland, by more than 7 per cent. ; while in France, Italy, Austria, and Russia the annual increase cannot fall behind these figures. On the other hand, in the United Kingdom the proportion of the population for whom we provide the highest training is at best stationary, and in some years actually declines. We may still believe that man for man an Englishman is superior to the citizen of any other country, but not even the most sanguine patriot can ignore the advantages of education. . . . We have come, at the opening of the twentieth century, to an era of professional expertness, in which the merely cultivated amateur is hopelessly beaten out of the field."

Mr. Webb points out that the new universities are not, and should never be, intended to become the rivals of Oxford and Cambridge. They have different aims and different methods,—they also appeal to different classes. He then describes the functions of the new universities, which is briefly to turn out the graduate fully equipped, not only as a cultivated citizen,—as is now the case,—but also as far as may be possible as a trained professional.

The conditions and limitations of the new universities imply,—first, that they will rapidly become large and numerous frequented institutions, and, secondly, that the standard of their teaching will be extremely high. They will be practical above everything else ; students will go there in order to master the subjects which

will enable them to gain a livelihood. This will compel an intensive study of each department of learning unknown to the average "pass" man. Imagine the economic professor at Oxford having to lecture on banking and currency daily before a class of bank clerks and branch managers in such a way as to retain their respect and convey instruction!

LONDON'S NEED.

Mr. Webb pleads for a great technical high school, of the Charlottenburg type, to be erected on the four or five acres of vacant land at South Kensington. The University of London is lamentably inadequate for the needs of the great metropolis! It needs money, and the stimulating impulse of a great ideal. It would take \$250,000 a year, at least, to put the science faculty properly on its feet. The engineering faculty is in such an infantile condition that the advanced mechanical student is advised to go to the McGill University at Montreal or the Polytechnikum at Zurich. To set the whole university on its feet and equip it with the necessary endowment requires at least five millions sterling. Each of the nine other new local universities proposed would require about \$2,500,000. Within the next decade, says Mr. Webb, it will be necessary to provide for England alone, for what we may call tertiary education and the advancement of learning, the equivalent of \$50,000,000.

The proposed universities are as follows:

"In London and its thirty miles radius; at Manchester, Liverpool, Birmingham, and Durham (with Newcastle-on-Tyne); for Yorkshire, for the East Midlands (with Nottingham), for East Anglia, for the southwestern counties (with Bristol, Exeter, and, it may be hoped, Plymouth), and for the south (with Reading and Southampton)."

MARTYRS OF THE POLE.

DURING the nineteenth century, two hundred ships have perished in Arctic exploration, over thirty million dollars has been spent, and numberless lives have been lost—but the mystery of the Pole remains unsolved.

THE RECORD OF THE NINETEENTH CENTURY.

The *Deutsche Revue* contains a most interesting article by the Marquis de Nadaillac upon the martyrs of the North Pole. The nineteenth century closed with the expeditions of Greely, De Long, Jackson, Peary, Nansen, Andrée, and the Duke of Abruzzi; and the prize of the greatest effort was a few more miles of ice-field conquered, and the attainment to the highest

point yet reached, 83° 33' 49" north latitude. This was done by Captain Cagni, Abruzzi's lieutenant. Three men in his expedition were lost and never again seen. Andrée's project was condemned by all the highest authorities as quite impossible, and the writer considers that after such a clear sign from heaven as was given by the continuous contrary winds during a whole year, Andrée should have desisted. His two companions did do so; but he had so many offers to fill their places that he could pick and choose as he liked. It was said that an American newspaper offered him \$20,000 to take one of its editors! Rumors of the discovery of the skeletons of the bold explorers were many, but none proved authentic. Sverdrup, however, seems to have achieved the greatest measure of success of all. He was captain of the *Fram* in Nansen's expedition. On that occasion, staying quietly on his ship, he penetrated almost as far north as did Nansen with fearful labor and privation. A second time he essayed to conquer the problem of the Pole in the *Fram*. He solved many important problems. He upset the theory that there was no land between America and Asia by the discovery of three islands. Sir Clements Markham, president of the Royal Geographical Society, spoke enthusiastically of Sverdrup, but strongly deprecated the costly expeditions which the various nations sent out in rivalry without any system of coöperation. He considers future North Pole expeditions as worthless; useless for geographical purposes; useless from the naturalist's point of view.

THE LATEST ATTEMPTS.

Sverdrup ought, perhaps, not to be considered a martyr of the North Pole, as he had a well-built ship under him all the time. Peary has proved by far the most energetic and persistent of Arctic explorers. He took his wife with him on his first expedition, during which a daughter was born to them. In all, he made seven expeditions, and discovered that Greenland was an island. The latest pioneers do not deserve the name of martyrs. They go in well-appointed ships, with tenders to keep them supplied with food and every luxury—and do nothing. The Russians made a bold attempt to reach the Pole by means of the ice-breaker, the *Zermak*, but it was a miserable failure. Two Danish expeditions did very good scientific work from the east side. They discovered a village full of skeletons. The men lying in the huts, the dogs at their feet, while the bones of bear and walrus round the huts showed that the grewsome sight was not caused by starvation, but by some sudden catastrophe.

THE GREAT BREAKFAST-FOOD INDUSTRY.

SOME astonishing facts of "The Industry That Cooks the World's Breakfast" are given by Mr. Frank Fayant in the *May Success*. Battle Creek, Mich., is the great home of this work, though there are other centers, such as the Buffalo manufactory of shredded-wheat products, which puts out a million biscuits a day and spends seven hundred thousand dollars a year in advertising. The Battle Creek gospel of prepared cereal foods is presented by Mr. Fayant as follows:

THE HEALTH-FOOD IDEA.

"A cereal-food factory is a huge digestive machine, relieving the human stomach of the more difficult part of the work of converting vegetable material into body tissue. The idea at Battle Creek, the birthplace of the 'health-food' industry, is that, as we gradually give up the vocations of brawn for the vocations of brain, we must change the character of our food. A farmer who toils from sunrise to sunset in the field, working his body and not his brain, is fit physically to eat foods that would send an office worker in a town to his doctor. When a swift torpedo-boat destroyer is sent out to secure a speed record, the engineers feed only picked coal to the fires; a present-day American, giving his whole thought to rapid achievement, is equally in need of picked fuel. It is a strange condition of affairs that, in this age of scientific research and of marvelous investigations into the secrets of life, we give so little scientific thought to the food we eat. At Battle Creek, dietetists have been working out a reform in food for thirty years. Their progress was slow up to the time when a few shrewd men saw the commercial possibilities of health-food manufacture. Now diet reform is rapidly becoming a question of national interest. With ten million dollars a year being spent to advertise 'breakfast foods,' the public is forced to take an interest in the food question. One cannot pick up a magazine, or ride in a street car, or walk down a street, without having the merits of some new cereal food brought before his eye. The idea of a scientific diet that Battle Creek is spreading out over the world may not revolutionize the diet of the human race, but it will work a change in millions of kitchens."

MORE THAN A HUNDRED VARIETIES.

"The varieties of food and drink that can be made from fruits, nuts, and cereals are almost infinite in number. Already there are more than a hundred on the market. Within a few years, it would seem, this scientific preparation

of foods will be an immense industry, and the present remarkable output of nearly fifty million dollars' worth a year will be increased many times."

THE IMPORTANCE OF THE PACKAGE.

"The rise of the 'breakfast-food' industry has made popular the package idea for kitchens. American housewives take kindly to pasteboard packages, or cartons. The sudden growth of the industry would have been impossible without the cartons. Small pasteboard boxes and large wooden cases, each holding two or three dozen cartons, are very large items in the cost of production, but labor-saving machinery cuts these items down to a minimum. In the food factories, the cartons are cut, printed, and folded almost automatically; and after they have been automatically filled with cereal food, they are closed with paste by machinery. Only by the use of all this automatic machinery is it possible to keep the price of the cartons under a cent apiece. A fraction of a cent is not much money, but one Chicago factory spends more than five thousand dollars a day on cartons. It recently gave an order for ninety thousand dollars' worth of paper for labels and fifty tons of ink to print them. The cost of wooden packing-cases about equals that of the cartons. In putting a carton of a certain well-known breakfast food on the market, the cost of the cereal product is about two and one-third cents, and the cost of the packing one and one-third cents, making the cost of manufacture three and one-third cents. The selling price to the grocer is eleven and one-third cents, and to the public, fifteen cents. One factory uses a piece of paraffine paper to wrap the product inside the carton. This paper costs more than one hundred thousand dollars a year, but the manufacturers think that American housewives want to have it, and the sale of this particular product would seem to indicate that they are right."

THE MARGIN OF PROFIT IN HEALTH FOODS.

"With the cost of a carton of breakfast food only between three and four cents, and the retail selling price fifteen cents, the industry is one that attracts prospectors like a new gold field. But not all get rich who erect food factories. The profit in the sale of cereal foods is large, but a market is not to be had for simply the asking. It needs just as much business sagacity to make money out of a food factory as it does out of a rolling mill or a railway. A market can be created and kept in existence only by persistent publicity, and by publicity that costs. It costs from four hundred to eight hundred dollars in advertising to sell one thousand dollars'

worth of breakfast foods. The man who makes wheat-coffee spent, last year, eight hundred and eighty-four thousand dollars in advertising in eight hundred newspapers and thirty magazines, and this year he is spending a million dollars. The maker of shredded wheat spends seven hundred thousand dollars a year in publicity. The maker of another well-known food was recently spending more than one hundred thousand dollars a month for advertising. He paid five thousand dollars for the privilege of painting the name of his product on a big chimney in lower New York that can be seen from all the North River ferryboats. He has for months kept before the public eye a comic figure and some swinging rhymes about his food. He has made all America and England laugh, but the laugh has cost the manufacturer hundreds of thousands of dollars."

INSECT ENEMIES OF PINE FORESTS.

THE commercial interests of the owners of pine forests are seriously affected through injuries to the trees by insects (*Retiniae*) which eat into the young leaf-buds and burrow in the branches, destroying the new growth to such an extent that in some places whole forests have become worthless.

The last number of the *Centralblatt für Bakteriologie* departs from its custom of publishing subject-matter relating only to the science of bacteriology, and presents a paper by Dr. J. R. Bos, of Amsterdam, concerning injuries by insects in the pine forests of Holland.

Most insects are totally different in appearance and habits during different phases of their life-history. The eggs from which they hatch do not contain enough food material to enable the developing organism to attain its perfect form before hatching, as birds, etc., do; consequently, the insect hatches as an immature, worm-like creature that proceeds to forage for itself until it is ready for its final metamorphosis into the mature form.

It is during the immature, larval stages, when eating is its chief occupation, that the insect acquires an economic importance through its injuries to the trees. One kind of *retinia* requires two years to develop to the adult form; the others, injurious to forest trees, require only one year.

One form (*Retinia duplana*) which attacks the leaf-buds of the pine reaches the mature, butterfly stage in April, and lays its eggs in the buds just before they are ready to grow out into branches. The larva hatches in May, and the new branches are already grown out before the

feeding of the worm becomes of any importance. On this account, the larva of this species is always found burrowing in the upper, tender part of the twig, with the result that the young needles growing in this part of the tree become sickly and fall off, followed by the withering of the whole branch.

A second form (*Retinia trionana*) attains the winged stage of development in May or June, when the young branches as well as the needles of the pine have grown out and the terminal buds are present. The adult butterfly deposits an egg in this bud, which contains the rudiments of next year's branches, and the larva, hatching in the autumn, eats out the bud, completely destroying it. The next year, lateral buds, which under normal conditions do not grow out, develop an excessive number of small branches which are short-lived and form the so-called witches' broom.

Another species (*Retinia buoliana*) becomes mature in July. The larva leaves the egg at the end of August, and eats very little, or nothing, before winter, but begins the following spring, when the leaf-bud has developed into a twig, which it eats out from underneath, commonly causing the twig to wither and die, when the larva attacks a second branch with similar effect. Sometimes, if the twig is very vigorous, it continues to grow after being burrowed into by the larva, but the injury first received weakens it and produces a bent branch called a wood horn.

The three species have similar habits, and the difference in the harm done is due chiefly to the difference in the time of egg-deposition and the consequent effect of the larva on the buds. Other variations may occur as the result of seasonal variations of the climate, condition of the soil, etc., which may cause an earlier development of the twigs, making them stronger and better able to resist the attacks of the larvæ, which would not be affected by such changes and would hatch at the usual time.

The French entomologists have seemed to find these insect pests especially troublesome, and have reported that in parks and forests infested by them not a pine tree escaped being killed or dwarfed. They consider these insects the worst enemy of pine-tree culture.

The signs of the presence of the insect larvæ are the development of an excessive number of sheath-like branches at certain places, the development of broad, thick needles, and also of needles growing in threes instead of twos. When young trees are attacked, they do not develop a main trunk, but instead have several branches and present the appearance of a bouquet of pine branches. Growing forests may be entirely ruined in this

way. An infected tree becomes a center of infection for the following year if left to itself. As a preventive, the tree should be destroyed or the infested branches broken off and burned. There are also a number of insects which are parasitic on the various species of retinæ, and will exterminate them if introduced into the infested localities. These insects determine in some way where the retinia eggs are deposited and deposit their own eggs in the same place. The larva of the parasite hatches and devours the helpless and wood-eating larva.

ADELAIDE RISTORI.

THE octogenarian Italian actress, Ristori, now living in retirement in Rome, is the subject of a warmly appreciative sketch by Marie Donegan Walsh in the *Philharmonic*, of Chicago, for March.

Following in the footsteps of her parents, both of whom belonged to the dramatic profession, Ristori began her stage life at the age of twelve. "Her first important part (suggestive of the branch of art where she was to score her greatest triumphs) fell to the young actress' share in her fifteenth year, when she appeared in the tragedy of 'Francesca da Rimini.' Her actual dramatic career began in 1837, when she joined the Royal Sardinian Company. The young girl's real ability and talent were speedily realized in her native country, so keenly critical in matters of art that nothing short of genuine merit is accepted. After much study and hard work, Ristori played in various cities; and in every Italian city she visited, her success was assured. From this time, her series of triumphs began—triumphs which only ended with the tragedienne's retirement from the stage. Her fame became world-wide, every European capital opening its arms to the talented young artiste, the greatest living exponent of classic drama, whose exquisite charm and naturalness vied with her genius in captivating all hearts.

"The English people always proved fervent admirers of the great tragic actress, and some of the records of her great successes were in England. One of Ristori's performances was attended by Mazzini (at that time an exile in England), and in an interview with the trage-

dienne, the great Italian statesman assured her that her marvelous histrionic powers had evoked from him a tribute which not even the wrench of parting from his beloved country called forth,—that of tears. Adelaide Ristori was always an untiring champion in the cause of Italian liberty and unification, and eloquently pleaded her country's cause in many lands with unflinching success.

"Among other memorable achievements of Ristori was the rendering (after years of study) of 'Macbeth' in English, at Drury Lane, in 1882. Another notable success was registered once in theater-loving Manchester (always ready to appreciate real dramatic talent), when in their genuine admiration of the actress' perfection the public, forgetting insular reserve, shouted like one man 'Viva l'Italia!' The Old World and the New united in claiming Ristori; North and South America as well as Australia paid tribute to her gracious charm, and she was enthusiastically received on every visit paid to all the great cities of the United States.

"Her repertoire of plays is one of the most varied, perhaps, ever undertaken by an actress classic authors of divers nationalities being interpreted by the tragedienne with equal ability to those of her own nationality. Adelaide Ristori (unlike many tragic actresses) could 'stoop to conquer' by bright vivacity in comedy. Her masterpieces (given with unflinching success in almost every capital of the civilized world) were: 'Medea' by Ernest Legouvé (the celebrated French playwright, still living and in his ninety-seventh year). Schiller's 'Mary Stuart,' 'Macbeth,' 'Marie Antoinette,' 'Judith,' 'Mirra' by Alfieri, 'Phedee,' and 'Lucretia Borgia.' Besides these, Ristori has appeared in many other title rôles by celebrated authors, both foreign and Italian. She has created many a striking figure in the annals of histrionic art; and none could outrival her in depicting types of the strongest and noblest, as well as the weakest, of womanhood. Side by side with the nobly sorrowful figures of a *Mary Stuart* and a *Marie Antoinette* there will go down to posterity an impassioned *Lady Macbeth*, a fateful *Medea*, a *Deborah* and *Judith* truly scriptural in their grandeur, or the bewitching sweetness of the light-hearted *Locandiera* by Goldoni."



THE PERIODICALS REVIEWED.

THE CENTURY MAGAZINE.

UNDER the title "The Hampered Executive," Mr. Henry Loomis Nelson, in the May *Century*, shows how Congress has come to limit the power of the Chief Executive which the laws seem to confer upon him. In crises, the President has enormous power. As Mr. Lincoln said, "As commander-in-chief of the army and navy in time of war, I suppose I have a right to take any measure which may best subdue the enemy." Until the war opens, however, the President has no discretion to speak of. He cannot even authorize experts to drill their troops in the methods which they deem the best unless Congress agrees, and Congress seldom agrees with expert advice. The President's second supposed power of granting pardons has also become limited, practically speaking, and the power of negotiating treaties, of nominating officers to the Senate, and other officers he has been authorized to appoint are notoriously dependent on the good-will of Congress. Mr. Nelson protests against the tendency to load responsibility on the President without the power which ought to accompany responsibility.

THE GREAT TIMBER OF OUR NORTHWEST.

A very readable article on the great forest districts of the Northwest is given by Mr. Ray Stannard Baker, under the title "The Conquest of the Forest." He gives some extraordinary facts concerning the waste of magnificent fir areas of the Northwest by fire and careless lumbering. It is estimated, for instance, that while about 20 per cent. of the available timber of Washington has been cut by lumbermen, over 22½ per cent. has been destroyed by fire. He says that timber in the Pacific Northwest seems all but inexhaustible. One authority estimates that there are standing in Washington 200,000,000,000 feet of timber,—red fir, hemlock, and cedar; in Oregon, 225,000,000,000 feet,—red fir and yellow pine; in California, 200,000,000,000 feet of the same species. At the present rate of cutting, 120 years would be necessary to exhaust the forests, but it is probable that the rate of cutting will increase enormously, owing to the exhaustion of the Eastern wood-supply. In two decades, the Oregon product has increased from \$2,000,000 to \$10,000,000 a year; Washington, from \$1,700,000 to over \$30,000,000; and California, from \$8,000,000 to over \$13,000,000.

THE SULTAN OF MOROCCO.

The recent disturbances in Morocco give an unusual interest to Mr. Arthur Schneider's "With the Sultan of Morocco." Mr. Schneider was a member of the Sultan's household for some sixteen months, to March, 1902, and acted as his majesty's preceptor in art. This writer paints the Sultan as a rather naïve, well-intentioned young man, who has inherited from his mother a taste for the civilization of Europe.

There is a very pleasant chapter of reminiscences of "Modern Musical Celebrities," by Hermann Klein, dealing, this month, with Adelina Patti, who is to pay a visit to the United States next winter, singing in concert only. A chapter in the series of sketches of notable women deals with Mme. Blanc; Mr. Sylvester Baxter describes Sargent's mural painting, "The Redemption," in the Boston Public Library, and there is a sketch of "Thomas Arnold the Younger," by William T. Arnold.

HARPER'S MAGAZINE.

IN one of Mr. H. C. Merwin's delightful and discriminating essays in the May *Harper's*, "Recent Impressions of the English," he remarks that in respect to mental activity, England bears the same relation to Scotland that it does to the United States. "Both in Scotland and the United States, the average of intelligence is far higher than it is in England; but I think we must admit that in the nobler departments of intellectual achievements, we also are as yet inferior to the English. It is the same in respect to oratory. The average of the speaking in the House of Commons is lower than it is in the American House of Representatives, but the best English speakers surpass the best American speakers." Mr. Merwin refers merely to the abstract and higher branches. When it comes to applied science and practical art, he finds the American superior. In surgery, we are probably on a par with the English. In civil or mechanical engineering, we excel, and we are infinitely superior in trade, in mechanics and in manufactures.

WHERE SHAKESPEARE GOT "KING JOHN."

Mr. Edwin A. Abbey's Shakespearean illustrations appear, this month, in "King John," with a critical comment by Mr. Joseph Knight. Mr. Knight says there is no doubt that a previous play on the same subject was in existence when Shakespeare's "King John" was written, that it had been acted with success, and was afterward erroneously or fraudulently ascribed to Shakespeare. The title was "The Troublesome Raigne of John, King of England." Shakespeare exploited this play in the "King John" we know, and adhered closely to its story, though his obligation as regards language was scarcely perceptible.

Mrs. John Van Vorst writes on "The Woman of the People," there is an impressionistic study of Constantinople by Mr. Arthur Symons, and a critical estimate by Hamilton Wright Mabie of Emerson's influence today, one hundred years after his birth. We have reviewed the following articles from the May *Harper's* among the "Leading Articles of the Month": "The Mechanism of the Brain," by Carl Snyder; "A Strange People of the North," by Waldemar Bogoraz; and "Photographing the Nebulæ with Reflecting Telescopes," by Prof. G. W. Ritchey.

SCRIBNER'S MAGAZINE.

CAPT. A. T. MAHAN, the famous naval authority, writes in the May *Scribner's* on "The Organization of the Navy Department in the United States." The whole extent of ocean in which the United States habitually maintains a naval force is divided into districts called stations, each one usually under an admiral, and each one independent and responsible solely and directly to the Secretary of the Navy. For providing and managing the tools of the naval seamen—ships, guns, and engines—and performing other acts of naval administration, there are eight bureaus in the department, each representing in its way the Secretary: Yards and Docks, Construction and Repair, Steam Engineering, Ordnance, Equipment, Supplies and Accounts, Navigation, Medicine and Surgery. Captain

Mahan thinks that the Navy Department lacks some sequence of interest and action, owing to the fact that there is a new Secretary chosen every four years, and there is no other body to perpetuate a traditional and positive policy. The navy needs in its administrative constitution "something which shall answer to the continuous interest of the people in civil details; something which, while wholly subordinate to every Secretary, shall embody a conservative and progressive service idea, and in so doing shall touch both the public, from whose sense of national needs impulse comes, and the administration, ashore and afloat, upon whose response to impulse efficiency depends. That a Secretary can do this has been abundantly shown; the dangerous possibility, also amply demonstrated, is that several in sequence may lack either will, or power, or professional understanding."

GENERAL GORDON'S REMINISCENCES.

The opening feature of *Scribner's* is a chapter of reminiscences by Gen. John B. Gordon, of the Confederate army, "My First Command, and the Outbreak of the War." General Gordon is one of the very last of the great figures of the war on the Southern side, and his account of the company he organized in the mountain districts of Georgia, Alabama, and Tennessee,—the "Raccoon Roughs,"—is of unusual interest. General Gordon takes occasion to set off General Lee's view of the right and wrong of the great struggle against General Grant's, and to protest against any partisan utterances to-day. His own view is that at present the one thing "wholly and eternally wrong" is the effort of "so called statesmen to inject one-sided and jaundiced sentiments into the youth of the country in either section." He thinks there is no book in existence in which the ordinary reader can find an analysis of the issues between the two sections which fairly represents both the North and the South.

PRESTIDIGITATEURS AND MEDIUMS.

Mr. Brander Matthews, in "The Strangest Feat of Modern Magic," recounts an extraordinary exploit of the famous "magician," Robert-Houdin, before Louis Philippe in the Palace of Saint-Cloud in 1846. The "magician" himself does not explain the manner in which he accomplished the extraordinary trick, but Mr. Matthews undertakes to suggest ways in which it might have been achieved, and suggests, further, the caution it should compel in all honest investigators toward every one who professes to be able to suspend the operation of the custom of nature. "No one of the feats attributed to Home, the celebrated medium who plied his trade in Paris during the Second Empire, was more abnormal than this trick of Robert-Houdin's, and no one of them is so well authenticated."

THE COSMOPOLITAN.

MR. J. HENNIKER HEATON begins the May *Cosmopolitan* with an account of the working of the "Governmental Parcel Post in Great Britain." The writer advances the prophecy that every civilized nation will sooner or later possess a parcel post. "It is certain that a community which is content to leave the conveyance of its parcels in the hands of private contractors must either be miserably poor or immensely rich—and, it may be added, long-suffering." In England, the parcel post was established in 1886 by the late Henry Fawcett. The result shows that the post-office

gives 20 per cent. better speed in delivering articles than the private carriers, and the rates now charged in England are—for parcels up to a pound, threepence; up to two pounds, fourpence; and so on up to eleven pounds, with a charge of one shilling. Mr. Heaton says the United Kingdom has made notoriously bad bargains with the railroads. In order to offset this now to some extent, the post-office is beginning to send parcels by its own vehicles, horse or motor, now run on most of the main roads from London, and by this means 11,500,000 parcels a year are saved from the extortionate railway rates. When "franking" was allowed to members of Parliament and others, the privilege was sometimes sublet for as much as three hundred pounds a year. On one occasion, a member of Parliament sent a grand piano through the post-office, and a nurse and two cows were franked to the British ambassador in Holland.

SCIENTIFIC CORN-GROWING.

In "The Marvels of Corn Culture," Mr. A. D. Shamel, of the Illinois Experiment Station, tells of the extraordinary results of scientific breeding of corn to produce the most perfect ear and grain. He tells of individual instances of Illinois farmers who have improved the yield per acre as much as twenty-five bushels by using improved seed corn, and a single farmer is now planting seven thousand acres with this scientifically tested seed. Mr. Shamel complains that unscrupulous seed dealers have retarded this movement by advertising, under fancy names, really poor seed corn, shelled from good ears, poor ears, and nubbins without selection. After being persuaded by expensive and beautiful catalogues to try these seeds, the farmers would become disgusted and would denounce corn improvement as a fraud. Mr. Shamel says that nothing can be told from shelled corn. All seed corn should be bought in the ear, so that if the buyer is not satisfied with the type it need not be planted. There is no escape from the fact that ears will be produced like those of the seed.

THE GOULD-ROCKEFELLER ALLIANCE.

In the "Captains of Industry" articles this month, Mr. Samuel E. Moffett writes of the late Gustavus F. Swift, Mr. Dexter Marshall of Clement Acton Griscom, and Robert N. Burnett of George Jay Gould. Mr. Burnett says that Mr. Jay Gould's heir and successor had a serious altercation with Mr. J. P. Morgan over the proposed purchase of the New York & Northern Railroad by the Manhattan Elevated Railroad, and that this incident turned him to the Rockefellers for aid in his project of extending the Gould system of railroads in the West. It is said that Mr. Gould has won the friendship and confidence of Mr. John D. Rockefeller to a marked degree, and that from year to year the Rockefeller millions have been poured into the various Gould schemes.

M'CLURE'S MAGAZINE.

"THE End of the World" is the title of the first article in the May *McClure's*, a title which suggests something startling over the name of Prof. Simon Newcomb, the eminent astronomer. Professor Newcomb writes from the vantage-point of 5000 or 6000 A.D. in telling how our planet came to grief through the collision of a dark star with the sun. When the astronomers on the summits of the Himalayas found this star, and made the more astonishing discovery that it

had no orbit,—in other words, that it was falling straight toward the sun,—the chief professor of physics in the world at once came to the conclusion that this meant trouble for the earth, a fact which was gradually communicated to the rest of the world. Professor Newcomb pictures the course of events in the two hundred and ten days which the astronomers figured out as the time necessary for this star to reach the sun, and the phenomena which ensued after the impact. The collision increased the light and heat of the sun very suddenly thousands of times, the whole surface of the earth was exposed to radiation as intense as that in the focus of a burning-glass, which will melt iron and crumble stone. The works of man and every living being on the earth were destroyed, and the worst of it all was, as will occur to many, that this end of the world did not come suddenly, but was protracted, with its horror, over several days, even after the actual collision. Professor Newcomb's essay will be more worth while than most such efforts, furnishing, as it undoubtedly does, a graphic presentation of one of the methods by which astronomers consider that the world may actually lose its population.

THE NEW YORK NEWSBOYS.

Mr. Ernest Poole, writing of "Waifs of the Street," gives us a glimpse into the world of the newsboy and the other waifs that recruit the juvenile asylums. He makes the uncomfortable discovery that of the worst classes of the street workers, 80 per cent. have terrible diseases by fifteen, and a horrible proportion of them become messengers and servants for the dives in Chinatown. In the narrow streets near Newspaper Row, one will find a hundred of these ragged little chaps sleeping on the streets between 12 and 2 o'clock at night; that is, after the last edition of the evening papers are sold, and before the morning papers have come out. "They lie in tangled heaps of twos and threes over gratings, down steps, and under benches. Their faces are white, cold, and unconscious,—like the faces of dead children."

FRANK LESLIE'S MONTHLY.

THERE is a graphic account of "The First Ascent of Mount Bryce," by James Outram, in the May *Frank Leslie's*. This great mountain lies in the elbow of the Columbia River, some sixty miles from human habitation. It is 11,800 feet high at the summit, and the complete ascent was finished last August by the writer, accompanied by a Swiss guide. The mountain was named, in 1898, after Mr. James Bryce, who then held office as president of the Alpine Club. It projects westward from the Continental Watershed, rises in splendid isolation from a massive base to a long and extremely narrow ridge, crowned by overhanging cornices of snow, and culminating in three sharp peaks. The summit looms almost vertically above the timber slopes and foaming torrents of the Bush River, more than eight thousand feet below.

There are some exciting "Tales of the Northwest Mounted Police," by Agnes C. Laut, whose duties cover a region a thousand miles wide, five hundred miles from north to south. For a score of these brave horsemen to arrest an Indian horsethief in a reserve of several thousand Indians was a common feat. Of late, the duties of the mounted police have been much more peaceful than formerly. Still, on the patrol, they annually travel more than a million miles, and have enough to do in punishing "rustlers" and maintaining

order in the wild crowd of gold-seekers pouring to the frozen north.

In an article on "The Deep Sea Sailor," by Mr. Broughton Brandenburg, who has gathered his information from his own seafaring experience, the writer says the stewards of the steamships are paid more poorly than any other class which goes to sea, yet he has known stewards to make two hundred dollars on a six weeks' voyage from their tips. There is a delightful nature article by William Davenport Hulbert, "What the Trout Stream Saw," and further chapters of "The Autobiography of a Shopgirl."

EVERYBODY'S MAGAZINE.

THE present troubles in Macedonia lend timeliness to the sketch, in the May *Everybody's Magazine*, of Boris Sarafoff, who became, three years ago, the president of the Macedonian Revolutionary Committee, which he has organized into a powerful and menacing union. The Macedonian patriot is a young man of thirty who inherited from generations of Bulgarian ancestors his hatred of Turkish tyranny. When he was five years old, he saw his father and grandfather dragged from home in chains by the Bashi-Bazouks, lashed, and imprisoned on the charge of treason. The Christian missionaries in Macedonia believe that Miss Stone's capture was the work of the Sarafoff committee, and it well illustrates the length its elusive guerrilla chief will go to in order to obtain money to prosecute his work. Sarafoff has now joined hands with the conservative element, and it looks as if his committee might precipitate a conflagration involving, perhaps, Turkey, Russia, and Austria.

In Mr. A. R. Dugmore's account of his experience with a family of chickadees, there is marvelous evidence of the quick friendship and confidence that can be established between man and birds. Mr. Dugmore's wonderful camera shows this family of young birds being fed by the mother on the writer's knee, and the old birds perched on the bulb of his camera apparatus while it was held in his hand.

Eleanor Hoyt, in "Romances of New Americans," tells of the comedies and tragedies that can be seen at Ellis Island in the midst of the disembarking immigrants; David Graham Phillips tells of "The Men Who Made the Steel Trust," and especially of the early years of Carnegie and Phipps, when during and just after the war the two were running a modest forge in Pittsburg; Frederick T. Hill discusses "A Lawyer's Duty with a Bad Case," and there are some highly amusing "Remarks" from the witty after-dinner speaker, Simeon Ford, whose humorous addresses are to be published in book form.

THE WORLD'S WORK.

WE have quoted in the "Leading Articles of the Month" from Mr. W. W. Wheatly's description of the transit facilities of New York, present and prospective, in the May *World's Work*. An extensively illustrated feature deals with the Louisiana Purchase of Jefferson, which is the subject of an article in the REVIEW OF REVIEWS this month, the *World's Work* approaching the subject from the point of view of illustrating photographically the tremendous development to which Jefferson's great purchase has come in the twentieth century.

Lieutenant-Commander Albert Gleaves contributes a brief article on "The Naval Strength of the Powers," showing the advance in the past year made by the leading nations toward superior naval equipment and efficiency. He says that if the basis of comparison be tonnage, the list of powers, in order of strength, now is England, France, Russia, the United States, Germany, Italy, and Japan; if, on the other hand, it be tons of displacement per mile of seacoast, the order will be entirely changed, as follows: Germany, Italy, France, Japan, England, Russia, the United States.

In "Building Towns to Order," Mr. H. H. Lewis describes the methods of suburban promoters of the class that supply free railroad tickets, sandwiches, and a brass band. He says that not by any means all of the schemes for suburban communities are successful, even in the favored district around congested Manhattan Island, as he has found at least five undoubted failures within a radius of fifteen miles from New York. In "The Business 'Engineer,'" Mr. Raymond Stevens tells of the scientific methods of reorganizing industries to make them most efficient, and of a manufacturer who increased his business by five hundred thousand dollars and his profits by only eight dollars, until he was taught by an expert how to make money.

THE ATLANTIC MONTHLY.

MANY of the May magazines print some tribute to Emerson, apropos of the celebration of the one-hundredth anniversary of the philosopher's birth. The *Atlantic* begins with an essay by the Rev. George A. Gordon, "Emerson as a Religious Influence." Mr. Gordon thinks that Emerson will always stand among the greater religious forces in the nineteenth century, because of the lesson he brought to those who could understand him, to look at all reality immediately at first hand. His fundamental influence was this war against second-hand politics, art, philosophy, and religion.

In a sensible article on "The Evolution of the Trained Nurse," Mary Moss reminds us that whereas in England the agitation for organized training of nurses was begun in 1825, and the French had as early as 1819 conceived the idea of bringing up all soldiers' orphans to be nurses, in the United States there were no trained nurses before 1873. This writer shows the need of a State examination for nurses which would distinguish between practically trained caretakers or attendants and nurses thoroughly equipped in every branch of their profession. She suggests the forming of central registries or directories in each city, governed by the strictest rules, and managed by the nurses themselves. As the registries are now run by committees, clubs, and hospitals, there is a great lack of coöperation, and some of the best nurses are not registered at all, and can only be had by sending to their homes or boarding-houses. She advises six months' careful instruction, both practical and theoretical, before allowing nurses to enter the hospital wards.

There is a discriminating critical review of "Lady Rose's Daughter" and the novels of Mr. Norris, a further chapter in Mr. Hardy's delightful new novel, "His Daughter First," and other pleasant contributions of fiction and essay. We have reviewed, among the "Leading Articles of the Month," "The Mulatto Factor in the Race Problem," by Alfred Holt Stone, and "The St. Louis Congress of Arts and Sciences," by Prof. Hugo Münsterberg.

THE NORTH AMERICAN REVIEW.

THE publication of "Lady Rose's Daughter" is the occasion of a highly eulogistic critique of Mrs. Humphry Ward's work as a novelist by Mr. Hamilton W. Mabie in the April *North American Review*. The depiction of such a character as Julie Le Breton, says Mr. Mabie, required "the very unusual woman who is neither afraid of the passion side of life nor blind to its tremendous ethical significance." A woman of uncertain moral insight might have stated the problem of such a temperament as that of Julie Le Breton; but only a woman of clear moral insight could have solved it.

THE MONROE DOCTRINE AND CIVILIZATION.

"An American Business Man" takes the novel position that the assertion of the Monroe Doctrine operates as "a bar to civilization" in the Latin-American countries. He would encourage the European powers to step in and suppress disorder and anarchy throughout Central and South America. He especially applauds the course of Germany in the Venezuelan matter, and declares that until the United States assumes the responsibility of policing all those countries, we cannot, with any show of dignity or good faith, say to Europe, "Hands off."

THE POLITICAL ECONOMIST AND THE LABOR PROBLEM.

Professor Hollander, of the Johns Hopkins University, contributes a well-considered estimate of the service rendered by economic science in the solution of the labor question, taking the ground that the political economist, by virtue of his purpose and method, may be expected to attain the largest and most intelligent grasp of the labor question, and that he should be regarded by both the workingman and the employer as the person best qualified to express an authoritative opinion, even on the practical phases of the question. In other words, we must resort to the expert in all human affairs,—in ailments of the body politic as well as in disorders of the physical system.

THE CHINESE NEGOTIATIONS.

Dr. Gilbert Reid writes on "The Unsatisfactory Outcome of the Chinese Negotiations," maintaining that, under the pretext of preserving the integrity of China, a real blow has been struck at the sovereign independence of the empire. The restrictions imposed by the powers make China less able to govern herself than she was before. In conclusion, Dr. Reid declares that "the negotiations have failed, judged either as a policy of superior force, tending to frighten the people from a repetition of hostilities, or as a policy of magnanimity, intended to transform a nation of foreign haters into confiding friends."

OTHER ARTICLES.

Mr. Benjamin Taylor writes on "Shipping and Subsidies," laboring to controvert Mr. Cramp's recent assertion that British maritime supremacy has been built up on a system of subsidies. Mark Twain concludes his series of controversial articles on Christian Science; Mr. Lloyd Sanders contributes an instructive article on "The Sultan and the Caliphate;" several distinguished painters pay tribute to the memory of the artist Twachtman; M. Charlemagne Bracq sets forth "The French Side of the Newfoundland Difficulty;" and Mr. C. H. Stevenson describes the work of the United States Fish Commission. We have quoted elsewhere from Mr. Erastus Wiman's article on Canada's commercial independence.

THE ARENA.

THE Hon. Samuel M. Jones, who has just been reelected mayor of Toledo, writes in the April *Arena* on the advantages of a simpler manner of living for the American people. He says:

"It is perfectly clear to me that in the development of a pure democracy we have much to learn about the value and importance of simple living. In the social philosophy that fills the air to-day, I am constantly impressed with the thought that there is altogether too much importance attached to the stomach. Again and again it is dinned into my ears, 'A man must eat.' While admitting the truth of this statement, I must add that it will be well for a man to remember that it is probable more human life is destroyed by overeating than by starvation. Of the truth of this proposition I do not think any careful observer can have a doubt. Probably a hundred people are made sick or plant the seeds of disease within themselves by overeating or improper eating for every one that is injured by fasting."

A STUDY IN ADVERTISING.

Mr. Henry C. Sheaffer begins an interesting article on advertising with the statement, based on the excellent authority of Mr. Charles Austin Bates, that the amount of money yearly spent for advertising in the United States is about \$600,000,000,—a sum equal to the value of the annual corn crop, or nearly twice the value of the wheat crop, more than six times the value of the pig-iron production in a year, and nearly three times the annual gold production. In the matter of magazine advertising, Mr. Sheaffer easily shows that page advertisements in the leading magazines are distributed at far less cost to the advertiser than the cost of distributing the cheapest kind of circulars—"with the additional advantage that the magazine is read by every member of the family, and is preserved for months or years, while most of the circulars would probably be thrown into the waste-basket unread."

Notwithstanding the great advantages that the magazines offer, Mr. Sheaffer estimates that there are not more than one thousand general advertisers in the whole country—an astonishingly small proportion of the total number of firms and corporations engaged in advertiseable lines of business.

GUNTON'S MAGAZINE.

IN the April number of *Guntton's* there is a vigorous defense of the tariff system against the attacks of the pessimists who are constantly asserting that the tariff is handicapping our manufactures. In reply to the complaint that prices are abnormally inflated, the writer maintains that the tendency of prices in most lines of manufacture is distinctly downward, and that this is due to the steadying influence of the great corporations.

"If ever there was a time when the people of a country should refuse to listen to the preachers of pessimism, and turn a deaf ear to schemes for political experimentations, that time is now. No policy ever so completely justified its friends, no prosperity ever so bewildered enemies, as the experience of the last five years."

LEGAL STATUS OF WOMEN IN THE UNITED STATES.

Edith M. Hadley, LL.B., gives a valuable conspectus of the present status of women under the constitutions and laws of the States. Regarding woman's larger relations to the community, this writer says:

"In Wyoming and Washington, women have served as jurors, which privilege has since been considered illegal and prevented. Most of the States, including New York, always more conservative, have given women a school suffrage; that is, they are allowed to vote for and fill the position of school officers, serve as trustees, and members of the board of education. In Arkansas and Missouri, they may vote to grant licenses for the sale of liquor. In Kansas and Michigan, they have been allowed suffrage in municipal elections, though in the latter State this was subsequently decided to be unconstitutional. In Wyoming, Colorado, Idaho, and Utah, they may take part in the federal elections, so that, as a legal consequence, there would be nothing to prevent a woman from becoming a Senator from these States."

THE NINETEENTH CENTURY.

THE *Nineteenth Century* for April opens with four articles on the crisis in the church, etc. Mr. John Macdonell, C.B., writes a solid article on "South American Republics," from which we have space only to quote the following words spoken by President Diaz, of Mexico, exactly seven years ago:

"Each one of those republics ought, by means of a declaration like that of President Monroe, to proclaim that every attack on the part of a foreign power, with the view of curtailing the territory or the independence of, or of altering the institutions of, any one of the republics of America, would be considered by the nation making the declaration as an attack on itself, provided that the nation directly attacked or threatened in such manner bespoke the aid of the other nations opportunely. In this manner the doctrine now called by the name of Monroe would become the doctrine of America in the fullest sense of the word, and, though originating in the United States, would belong to the international law of the continent."

Mr. Somers Somerset has a short paper on the same paper on the same subject, in which he anticipates that, Monroe Doctrine notwithstanding, South America will be to the European powers in the present century what Africa was in the last.

THE SHORTEST AND BEST GHOST STORY.

Mr. Herbert Paul contributes one of his admirable literary articles, dealing with the novels of Thomas Love Peacock. From "Nightmare Abbey" he quotes what he calls the best and shortest ghost story in the English language. It is told by a clergyman, hence the opening sentence:

"I once saw a ghost myself, in my study, which is the last place where any one but a ghost would look for me. I had not been into it for three months, and was going to consult Tillotson, when on opening the door I saw a venerable figure in a flannel dressing-gown sitting in my arm-chair and reading my Jeremy Taylor. It vanished in a moment, and so did I; and what it was or what it wanted I have never been able to ascertain."

BACK TO THE LAND.

Lady Warwick in a brief paper describes her experiences with a contingent of laborers brought from the Salvation Army colony at Hadleigh Farm for the purpose of carrying out some gardening alterations. Her experience justified the experiment, and she suggests, that "several agriculturists might combine to pool their labor demands, and thus establish a small colony

from Hadleigh in their neighborhood. Such a colony, as I can testify, would be under good discipline, and well-behaved. They are neither loafers nor drunkards, but respectable workingmen. Employers who want labor need not bother themselves as to the precise religious or psychological means taken in making the wastrel a good worker. They will soon find out whether they can obtain what they want,—men who can hoe and dig, and some of whom are skilled manual and farm laborers, ready to work with a plow and reaper. The work at Hadleigh is not limited to farm labor. There is a brick-field which employs a number of men, and those who own brick-fields might also do worse than employ some of the Hadleigh brick-makers. In these ways, the farm colony might be extended in various branches throughout the country."

CONTINENTAL DUELING.

R. C. Bachofen von Echt describes "The Duel in Germany and Austria." The essence of the military duel he puts as follows:

"In Austria, an officer who refuses a duel or does not challenge in the case of an insult must leave the army with ignominy, and is degraded from his rank just in the same way as in Germany. But if he kills or wounds his adversary in a duel, he is punished and imprisoned in a fortress.

"A striking illustration of the dilemma in which Austrian gentlemen may find themselves may be seen in the following episode: Mr. von O., who is a lawyer and an officer in the reserve, and who wrote, some years ago, a book against dueling, was recently prosecuted for having challenged another man to a duel. He was condemned to one month's ordinary imprisonment. He conducted his own defense, and pleaded in a splendid speech that, although he was an opponent of dueling, he was compelled to issue this challenge under pain of losing his military rank. The month's imprisonment, as we have seen, entails the loss of army rank; therefore, whether he challenged his insulter or refrained from doing so, he was compelled to lose his rank as an officer in the reserve."

OTHER ARTICLES.

Sir Alexander Miller writes on the Irish land laws, Mr. Keir Hardie on the Independent Labor party, Mr. W. H. Mallock on "The Gospel of Mr. F. W. H. Myers," and Sir Robert Hunter on the present position of the licensing question.

THE CONTEMPORARY REVIEW.

THE *Contemporary Review* for April opens with a violent attack by "S. C. G." on the army articles lately published in the *London Times*, which the writer describes as "nebulous nonsense." As for the auxiliary forces, he admits that the *Times* contributor is in the main right, and proposes to deal with the problem in a later article.

FOR MUNICIPAL TRADING.

Mr. Robert Donald contributes one of his authoritative papers on "The Case for Municipal Trading." Dealing with the allegations of corruption, he points out that the opponents of municipal trading never see the taint of corruption in the presence of representatives of the drink trade on the town councils or the magisterial bench.

"Nor do we find the enemies of municipal trading

condemning contractors who are found scamping work. They see no conflict of interest in the presence of councilors on the board of a local tramway or electric-lighting company. In fact, the chief aim of a company which owns electric-light, tramway, gas, or any other local service is to induce members to take an interest in the concern or become directors. We find that the National Telephone Company has influential aldermen or councilors on its local boards in some towns, and the same system is practised by most other large companies, including the British Electric Traction Company, which, through its directors and officials, carries on an uncompromising attack on municipal trading."

The charge that municipal trading is carried on at a loss is shown by Mr. Donald to rest largely upon a confusion of ideas, the loss on baths (which are sanitary measures) and public works, which are not municipal trading, being set off against the profits on real municipal trading.

CHURCH VIEWS ON DISESTABLISHMENT.

The Ven. Oscar D. Watkins argues that churchmen should work for disestablishment.

"When disestablishment is carefully considered apart from disendowment, its terrors are but small. There would be no formal repudiation by the state of the faith of the Church, for there is no formal acceptance of it on the statute book.

"But now we come to the *crux*. When disestablishment is pressed upon the Church by her enemies, what they mainly mean is disendowment, and on the subject of disendowment there is bound to be the gravest difference of opinion."

The income of the Church of England, capitalized, he estimates, is £129,455,032.

"If the Church were to receive, on disestablishment, two-thirds of the ancient endowments and the actual value of the recent benefactions, the figures would work out thus:

"Two-thirds capital value of ancient endowments	£82,037,565
"Actual value of benefactions since 1703	6,398,685
"Total	£88,436,250"

THE NATURAL ENEMY.

"Patriæ quis Exul" writes on "Our Relations with Germany." His article is mainly an attack on the pro-German articles published lately in the *Empire Review*.

"The German brain is a great asset in the world. Let us admire it for what it gives us. But, politically, let us beware of Germany. On few parts of the globe can she be of much use to us, whereas we are almost everywhere of great use to her. Till her fleet is ready, Germany cannot do without us. And when it is ready, she may 'do for us.' If we cannot come to terms with Russia, we must rely upon ourselves,—that is, upon our fleet, which must be invincible. But on Germany there can be no reliance. Her star is in the ascendant; in point of aggregate intelligence, she is the most vital nation of the world; she is ambitious, envious, and overbearing. She is still in many ways half a century behind us. A study of inner Germany reveals a picture of extraordinary brilliancy, intellect, power, and endeavor compressed into a massive medieval frame which seems strangely out of place and impairs the light. But in time the light will come, and Germans will be freemen. We have much to learn from them even now, and have no reason to abuse them. Germany

has nothing to give us; we can give her all. Her fate lies largely in our destiny."

SOUTH AFRICA,—NATIVE LABOR.

There is a joint article on the vexed problem of native labor in South Africa by Mr. A. F. Fox, Mr. John Macdonell, C.B., and Mr. Hugh E. Seebohm which will rejoice the friends of equal rights for all men, black and white. They protest against forced labor in any form, and point out that taxation to that end is not only unjust, but also unprofitable.

"The principle of taxing the natives to compel them to work is dangerous, irreconcilable with English traditions, liable to produce abuses, and a precedent likely to be mischievous. It may also be ineffectual. No reasonable hut or poll tax is likely to be sufficient to keep natives at work for more than a short time. If 'labor' taxes are to be effective for this purpose, they will have to be levied on a scale that would be grossly oppressive and would probably lead to widespread disaffection."

THE KAISER ON CHRIST AND HIMSELF.

If any one takes the Kaiser and his theology seriously, he may read Professor Harnack's "*The Kaiser on Christ and Revelation*," translated from the *Preussische Jahrbücher*. Following is Professor Harnack's testimony to the fact that the Kaiser actually does not claim to be infallible!

"There is no suspicion of authoritative decisions,—the whole letter breathes the spirit of liberty. For the writer is alive to the fact that in matters so delicate and sacred there is no room for behests; and he further recognizes that theology cannot shirk these questions, but that they must be threshed out most thoroughly, with courage and freedom. He hands them over to theological science.

"More fascinating still is the effect produced by the determination, the straightforwardness, and the warmth with which the Kaiser takes up his position in the controversy. What he has written is his very own, comes from his heart. He sets it forth just as he thinks and feels it, and he has jotted it down like one who is giving an account of the matter to his own self, omitting none of the little tokens of his own feeling, of his own personal experience. He feels his soul is bound up in Christ, and he will not speak of religion without bearing witness to and praising him."

THE FORTNIGHTLY REVIEW.

A WRITER in the *Fortnightly* for April signing himself "Vates" is of opinion that the policy of the German Emperor is dominated almost entirely by his dread of what will happen when Francis Joseph dies, and by way of preparing for the inevitable, he has made friends with the Sultan, he has courted the Magyars, and has practically secured the support of the Roumanians. He is now busy strengthening his fleet, for warships will probably be needed should Italy be disposed to insist upon adding Trieste and the Dalmatian littoral to the Italian Kingdom. The writer urges:

"As a matter of racial distribution, there is no doubt that the coast of Trieste is predominantly Italian. Therefore, should a distribution and rearrangement of territory become inevitable, from every point of view it is right that our weight should be thrown into the scale

of giving Trieste, at least, to Italy, and generally to assist her in the balancing."

MILITARY OLD-AGE PENSIONS.

Mr. Sidney Low makes a novel suggestion which is not likely to be adopted. He wants at the same time to reform the British army and to solve the old-age pensions system.

"The feature of the scheme would be its intimate association with a national old-age pension fund. Popular opinion demands the establishment of such a fund, and there is general agreement that it is in many ways desirable. But most of the projects which have been put forward have broken down owing to the difficulty of selecting the annuitants. To grant a pension to everybody, on attaining a certain age, would involve colossal and superfluous expense; to discriminate, on the ground either of poverty or of merit, is difficult, and might be impracticable, besides being somewhat unfair and highly invidious. But the reserve would supply an easy, a workable, and a perfectly just method of selection. The old-age pension might be regarded as deferred pay for military service rendered in this force. Any man who had completed his term in the First and Second Reserves, and had obtained his papers of discharge, showing that he had passed the proper tests of efficiency, would be entitled, on attaining the age of sixty, to draw a weekly payment from the state for the remainder of his life."

Persons willing but physically unfit to go through this training would gain their pension by serving as regimental clerks, storekeepers, etc. The idea is ingenious. But it means universal service of a kind or no universal old-age pensions.

A CRITICAL COURT OF HONOR.

Mr. William Archer pleads for the trial of cases between captious critics and aggrieved authors before a court of honor.

"'How,' it might be asked, 'are litigious persons to be compelled to submit their grievances to this board, which can possess no legal status or jurisdiction, rather than to the ordinary courts, which have power to award and exact damages?' There can, of course, be no compulsion in the matter; but (always supposing the board to have acquired prestige) we may be sure that a plaintiff who had refused to submit his case to its arbitration would come into the law courts under a heavy handicap. Again, the award of the board could have no binding power over a catankerous complainant whose case had gone against him. It would still be open to him to carry his grievance into the law courts. But who can doubt that he would think twice and three times about doing so when it was known that a jury of experts, in which men of his own craft were adequately represented, had declared him to have no just ground of action?"

OTHER ARTICLES.

There is a short poem by Mr. Yeats. Mr. Churton Collins writes to prove that Shakespeare was familiar with Greek tragedy. There is an article by Mr. W. Garrett Brown entitled "*The Foe of Compromise*," which is quite brilliant in its way, and is written in a remarkable, unconventionalized style very uncommon in monthly reviews, but we make no attempt to deal with it here. It is one of those papers which every one ought to read and no one to summarize.

THE NATIONAL REVIEW.

MR. LIONEL HOLLAND, in his article "Where Two Empires Meet," in the *National Review* for April, suggests the settlement of the Siamese question as follows:

"Our purpose would be attained were the guarantee of the Anglo-French convention of 1896 so enlarged as to include the whole dominions of Siam. Thus, France and England would mutually contract not to acquire any special privilege or advantage, nor to enter with an armed force, without the consent of the other power, within any part of the Siamese Kingdom. Such an extension over the whole of Siam of the guarantee of 1896 would imply little sacrifice on the side of Great Britain. The expansionists of Singapore would indeed be obliged to contract their day-dreams; and we might have to acquiesce in some infringement of the practical monopoly of trade which we enjoy in the Siamese dependencies of the Malay Peninsula."

THE STAGE,—BY AN ACTRESS.

Perhaps the most interesting article in the number for the general reader is Miss Ellaline Terriss' on "The Stage as a Profession." Like most people who have succeeded, Miss Terriss is convinced that if you have talent you will succeed. She warns the amateur against inferior "teachers of elocution."

"And the theatrical agent who puts the enthusiast on his books at a fee and then sends him to some elocutionary friend to receive instruction,—beware of him also."

As to the much-discussed "morals of the theater," Miss Terriss says:

"The condition of the theater is absolutely that of any other community, and I cannot recall a single instance of the downfall of any young girl *because* of her connection with the theater, and I have acted continuously in London for sixteen years. If a girl is flighty and silly, that she will be no matter where she goes; and so, if you are a parent or guardian, have no fears on this score. If trouble ever comes, don't make the theater the excuse, but be very sure that in nearly every case the same would have happened had the playhouse never

been entered. And do not jump at hasty conclusions because actresses (and I mean actresses, not people who make the theater a shop-window for themselves, and by foolish behavior bring discredit on a very large number of women) perhaps go about unchaperoned, and in a more open manner than is usual in society. It is in many cases a necessity that they should do so, and there are comradeships between working men and working women which are nothing more than sincere friendships, born of sympathy and respect, and the pleasure of which can never be known outside the artist's life, and so never understood by those who have not to earn their living."

THE LABOR QUESTION AGAIN.

Mr. F. D. P. Chaplin approves of Asiatic labor.

"To the Boer, the Asiatic will do no harm. Nor will the native in any way suffer. Even if on the mines all natives were replaced by Asiatics, the demand for labor would still be amply sufficient to provide occupation for all the natives obtainable. Nor, again, should the skilled workman have any cause of complaint, since it must clearly be one of the conditions regulating the importation of Asiatics that they are strictly limited to such work as is now performed by natives. As a class, indeed, the skilled workman will gain, since for every seven natives or Asiatics available one skilled white man can be profitably employed at a high rate of pay. The advent of two hundred thousand Chinese or Indians will, in fact, mean the advent of a white population of the very best class.

"Why, it is asked, should South Africa rush into difficulties from which the United States and Australia have for years been trying to extricate themselves? For these fears there is in reality but little foundation. In view of the experience to be gained from California, Australia, Canada, and Borneo (where Chinese are now successfully employed on the mines), it is surely not beyond the wit of man to devise regulations which may receive the force of law, rendering it impossible for Asiatics to enter the country save under indenture, or to engage or be employed elsewhere than on the mines."

THE CONTINENTAL REVIEWS.

REVUE DES DEUX MONDES.

THE *Revue des Deux Mondes* for March contains several notable articles.

M. Leroy-Beaulieu explains the dangers which in his opinion France runs from the persistent anti-clerical policy of the Combes ministry. For it is not merely a question of a domestic measure directed against monks and nuns; it vitally concerns France's foreign policy. The influence of France abroad has hitherto been powerfully supported by her traditional protectorate over Catholics both in the East and in the far East. But obviously, if the issue between the French Government and the Vatican were to amount to an open breach, this protectorate would be withdrawn from France. Whether it would be conferred upon Germany is doubtful, though the Kaiser might make a strong bid for the succession. Italy, too, would like it, but would probably not be willing to pay the necessary price to the Vatican.

THE DUCHESS OF PORTSMOUTH.

MM. Lemoine and Lichtenberger have collaborated in two articles dealing with Louise de Kéroualle, that extraordinary woman who was created by Charles II. Duchess of Portsmouth—"the Protestant mistress," as she called herself, putting her head out of the carriage window when the London mob was saluting her with brickbats. The writers have had the advantage of seeing the Duke of Richmond's papers at Goodwood, together with certain unpublished muniments in France, with the result that they have produced a remarkable picture of this amazing woman and the part she played in the sordid politics of the period.

OTHER ARTICLES.

Among other articles may be mentioned the continuation of M. Ernest Daudet's series on the Princess Lieven, including her return to Paris from London; M. Benoist's editing of the correspondence of M. Thiers,

covering the eventful period from May, 1871, to September, 1873; and the reminiscences of Comte de Moüy of that delegation which conducted the foreign relations of France from Tours and Bordeaux in 1870 and 1871, during the Siege of Paris.

NOUVELLE REVUE.

THE *Nouvelle Revue* tends to become more general in character every month. Perhaps the two most interesting articles are those which concern the London unemployed and the housing of the poor problem. The one entitled "The Unemployed" gives a careful analysis of the various blue-books and other publications dealing with this terrible and distressing problem. The article is apparently written entirely from the point of view of proving the decadence of the British nation.

THE HOUSING PROBLEM IN EUROPE.

Far more thoughtful and worthy of respect is the article concerning the housing of the working classes. The writer begins by giving some figures concerning the number of workers in Paris. In the French capital, 256,000 families occupy only one room each. Hitherto, the state seems to have hardly made any attempt to deal with the problem of overcrowding, but many private firms have taken the matter in hand, and insist on seeing that their employees are properly lodged in salubrious and airy dwellings. Fourteen years ago was founded the "French Society of Cheap Dwellings,"—in other words, a great building society, which has exercised a very salutary effect on the housing of the French working classes, and which has even been able to influence the passing of certain laws. Yet there are at the present moment in France 200,000 houses which have no windows, because, incredible as it may seem, there is still a French window and door tax!

Following on this startling fact, the writer describes at great length, and very intelligently, all that has been done in England for the housing of the working classes during the last sixty years. He pays a high tribute to Port Sunlight, and to Mr. Cadbury's model villages. In Germany, the housing of the working classes is only now beginning to attract attention. In Berlin, hundreds of families inhabit only one room each, and too often this room is situated in a dark and damp basement; some one hundred thousand workers live underground. The Krupp works have set an excellent example, the workmen's colonies established in connection with the works being admirably built, and the rents being very moderate. The Prussian Government some few years ago attacked the problem in the mining district of Spandau. In Holland, the state has also taken up the matter, and at The Hague, the worker, whether man or woman, can hire a pleasant, healthy room for the small sum of 62½ cents a week.

CHINESE REFORM PROPAGANDA.

Those interested in Chinese matters will find the account of the reformer Chang Chi Tung of value. This remarkable Chinaman is the head of what may be called the European party in China. He would like to see his country really reformed, and he spreads his views by means of little pamphlets, printed at his own expense, and distributed by the million through the Celestial Empire. One of these pamphlets, entitled "Learn," drew down on him the violent enmity of the Dowager-Empress, and he was indeed at one time con-

demned to death; but now he has been restored to his former dignities, and he is governor of two large provinces. The French writer analyzes the most important of Chang Chi Tung's manifestoes; in it he has the courage to declare that his beloved country ought to imitate Japan, and it is his fervent wish to see the Chinese poor really educated; in fact, he goes so far as to say that there should be in China a hundred thousand free schools where those who are too poor to pay can hope to be educated for nothing.

REVUE DE PARIS.

IN the *Revue de Paris* for March there is a thoughtful article on the late South African war viewed from the practical soldier's point of view. The writer is in no sense inclined to minimize the difficulties which met the English commanders, but he severely criticises the lack of technical knowledge of the ordinary British officer, while paying him a great tribute as regards personal dash and courage. The French tactician believes that in future wars the personality of the actual combatant and also of the non-commissioned officer will play a far greater rôle than has hitherto been the case, and he quotes with approval von Lindenau, who declares that the individuality of the soldier is not nearly enough exploited by his chiefs.

Another article, by an anonymous writer, attempts to describe what should be France's navy in case of a conflict with England, and the present state of the French navy is regarded as deplorable.

Strannik, the Russian writer, contributes a valuable paper on Wladimir Korolenko, a writer whose work is very much thought of in his own country, though as yet he does not seem to be known elsewhere. His stories, which deal with the Russian peasantry, are profoundly sad, and, indeed, hopeless in tone, and this is perhaps one reason why they have not been received with the same favor by non-Russian readers.

Judith Gautier, continuing her recollections, gives a vivid word picture of Gustave Doré, whom she declares remained boyish to the end. "His childish-looking pink-and-white face, his thin mustache, and long fair hair brushed off his forehead concealed a witty, vivacious personality. He loved practical jokes, and enjoyed nothing more than playing the clown."

NAPOLEON AT THE COUNCIL TABLE.

Those who are never tired of reading about the great Napoleon may learn something new of his many-sided personality in a curious paper dealing with his relations with the Council of State, for, as the writer truly says, it is a great mistake to think that Napoleon was never happy unless taking the field. He very much enjoyed what we should call a cabinet meeting, and those who were privileged to take part in these gatherings have put it on record that when dealing with those whom he trusted he was quite capable of taking advice, and of giving way even on a point which he had very much at heart. Some of his talk on these occasions is not without a certain native wit. As is well known, he was equally interested in the greatest as in the smallest matters, and when at one time it was suggested that every town should have a small prison, he observed: "Every inhabitant should make a point of seeing that the prison is comfortable and salubrious, for the day may come when he will be himself personally interested in the question." Concerning the word-

ing of certain penal laws, he declared that "penal laws should be written in a lapidary style; they should be as concise as is the Decalogue." Napoleon took the most fervent interest in everything that concerned religion; he was anxious to play in France the part played by Henry VIII. in England; that is, he desired to found a Gallican Church, and to destroy the power of the Papacy.

LA REVUE.

"**L**A REVUE" for March opens with a budget of unpublished letters of Challemlacour, and proceeds, somewhat unprofitably, to discuss whether or not divorce should be possible at the wish of one party. There is great divergence between the contributors to this symposium, and, apparently, few of the writers have any particular reasons for their opinions beyond their personal sentiments. M. Anatole Leroy-Beaulieu says that the proposal to allow divorce at the demand of one party would be to destroy marriage, to the great injury of the wife, and afterward of the children. On the other hand, M. Alfred Bruneau is quite positive that "liberty should be rendered to the innocent galley-slaves of bad marriages." Mme. Alphonse Daudet retorts with "horror" at the suggestion, and M. Gossez has as his ideal "The Republic of Plato; love and union free."

THE REHABILITATION OF THE DONKEY.

M. Henri Coupin contributes an admirable article on the intelligence of domestic animals. He says that after the dog, the ass is the most intelligent of domestic animals; and the proof of this is that his confidence in the judgment of his master is very limited. The ass is superior to the horse in that he is capable of associating two ideas, comparing alternatives, and deciding which is best for himself. He is even capable of showing his appreciation of music. An ass of Chartres was in the habit of paying visits to the Chateau of Guerville whenever music was going on. The lady who owned the chateau had an excellent voice, and whenever she began to sing, the ass used to approach the windows and listen with sustained attention. One day, he even burst into the room in order to show his appreciation.

The pig is another maligned animal, inasmuch as he is, when possible, one of the cleanest of animals. The pig will deliberately make his bed, fetching straw from outside his sty when possible. Pigs have been seen shaking apple trees in order to bring down fruit. Compared with the ass and the pig, the cow is a stupid beast, though bulls have on occasion been seen simulating death. Sheep are also among the non-intelligents, but, like most stupid things, they are susceptible of vanity. However, even the sheep in some things excels his owner, for while human beings prefer to fight their quarrels rather than arbitrate, an intelligent ram often prevents fighting among the other members of the flock, assuming, in M. Coupin's words, "the efficacious rôle of arbitrator, which he fulfilled, to the great joy of the flock."

A SOCIALIST SYMPOSIUM.

The symposium in the second March number deals with socialism. Three questions were put to the contributors: 1. "Do you recognize as the economic aim of socialism the transformation of a capitalist society into a régime where property will become collective as regards means of exploitation, and will be individual only as regards objects of personal use?" Replies to this

question were received from M. Vandervelde, Eugene Debs, Mr. Hyndman, and Mr. Sidney Webb, all in the affirmative. 2. "Do you think that the end can be achieved only by violence?" To this question, most answers were in the negative. 3. "What should be the Socialist tactics in Parliament?" On this question there is dissension.

Dr. Félix Regnault writes on psychical gymnastics, and insists upon the enormous power which the will, if exerted, may oppose to physical pain. The Indian fakir who drives long needles into his body without drawing blood suffers no pain so long as he exerts the will; but if he neglects to exert his will, he suffers, and blood flows. The punishment inflicted among the Dervishes on thieves was amputation of the forearm, the stump being thrust into boiling oil in order to stop the bleeding. During this operation, the faces of the victims were entirely impassive.

THE MAKING OF A FRENCH REVIEW.

The second number of *La Revue* for March contains a very interesting retrospective article dealing with the twelve years which have elapsed since M. Finot took over the editorship. *La Revue*, then entitled *Revue des Revues*, was founded in 1890, and at the end of 1891 had only forty-seven subscribers. At the beginning of 1892, the number had fallen to twenty-three. It was an article on "Russians and Germans," written by M. Finot, in 1892, which first drew public attention to *La Revue*. In 1893, the 23 subscribers became 1,300; in 1894, 2,200; in 1895, 3,900; in 1896, 5,200; in 1897, 6,800, and so on, thus after twelve years attaining a success and a reputation which other French publications take half a century to attain.

THE ITALIAN REVIEWS.

THE interest in the Abbé Loisy's book, written, it will be remembered, in refutation of Professor Harnack's "Essence of Christianity," and withdrawn from circulation in deference to the condemnation by Cardinal Richard, finds expression in the Italian reviews, both the *Civiltà Cattolica* and the *Nuova Parola* reviewing it from diametrically opposite standpoints. To the Jesuit *Civiltà*, Loisy's book, "L'Evangile et l'Eglise," seems scarcely less acceptable than that of Harnack; it describes it as full of "manifest errors" and of statements contrary to the faith, and the author himself as having "gone over to the enemy, at least objectively." To the *Nuova Parola*, on the other hand, the Abbé Loisy appears as "one of the most inspired and pious and cultivated priests in the ranks of the Church," and as worthy to rank, for genius and erudition, with St. Augustine and St. Thomas. His book, both for its erudition and its breadth of view, the writer regards as the most epoch-making volume of our time.

The interest of the *Nuova Antologia* for March lies in its literary and artistic articles. Professor Chiappelli discusses the pros and cons of a proposition which is exciting artistic circles in Florence,—whether, namely, a copy of Michael Angelo's great statue of David should be placed on the original site in the Piazza della Signoria.

G. Tarozzi draws out a long and elaborate contrast between the paganism of Nietzsche and the paganism of Carducci, wholly to the advantage of the latter. They hold in common their enthusiastic appreciation

of ancient pagan forms, but their consciences have developed on diametrically opposite lines.

A critical and biographical sketch is given of Alinda Brunamonti, poetess and art critic, who died in 1899. Believers in the higher education of women will be interested to learn that Signora Brunamonti's father, a professor at Perugia, was so disappointed at having no sons that he had his little daughter educated in all respects as though she were a boy. She was even dressed in boy's clothes until the age of eight. The result was to make her one of the most learned and accomplished women of her day.

The *Rivista Internazionale* continues to be one of the best of the Italian reviews for the serious discussion of social problems. In the February number, the first place is given to a practical summary, from the pen of L. C. di Chiusano, of the difficulties of the housing of the working classes in its moral, economic, and hygienic aspects. The author seems to favor municipal building and control.

THE DUTCH MAGAZINES.

PASSING the novel of G. van Hulzen, "In Lofty Regions," with which *De Gids* opens, we come to a remarkably readable critique of another novel; this is "Jörn Uhl," by Gustav Franssen, which has lately appeared in Germany. Franssen was a pastor, but, like some other ministers, he appears to have seen a greater field of usefulness in literature, and has produced this book. It is not a book of sensational mysteries, or a sex novel, or, in fact, a book of up-to-date theories or passions; its good qualities consist in its being devoid of all that, and in being an entrancing study of life of the ordinary kind. The book has had a tremendous success, and many writers have coupled the name of Franssen with that of Dickens. A book to be turned into English this, surely!

An article by Dr. Byvanck on P. C. Boutens is the first of a series on "Poets,"—not necessarily spring poets because it begins in a time approaching that season; on the contrary, the subject of this article is among the first of poets. The name of Dr. Byvanck is a guarantee that the article is learned and thorough.

The diary of a visit to Tripoli, in March of 1901, is a good account of this African province, and gives yet another idea of the place from the point of view of a Dutch traveler.

Onze Eeuw goes literally from grave to gay. The first article in the current issue is an essay on statistical physics, dealing with deep facts, experiments, and theories; further on is an equally learned essay of quite an opposite character, "Humor and Literature." Humor is not intended merely to amuse; it has the other and probably higher task of instructing. It serves to increase the importance of the serious observations of writers as well as to force home a truth more effectively than grave exhortations can do. Humor is to be found in the tragedies of Shakespeare, in the Psalms (where the most serious matters are touched on), in the sermons of Luther. Most great writers, however deep their subjects may be generally, go in for the humorous also.

Vragen des Tijds contains four articles, which is one above the usual number. The two which most interest foreigners are those on agricultural boards (written with the usual thoroughness of Dr. Bruinsma, an expert on agricultural matters), and on the law relating

to accidents. The new law on the subject of accidents to work-people contains certain provisions that require careful study on the part of those who have to carry it into effect, and the writer takes the opportunity to point them out.

Elsevier has an entertaining article on dolls. Generally speaking, there is not much that is new in ancient dolls, but the writer contrives to say a good deal that is not generally known about old Dutch dolls, while the illustrations are as interesting as the text. The article is based on the exhibition of dolls and toys that took place in Amsterdam in January of this year, and it must have been a treat for grown-ups as well as for the little ones, judging from the description. Old dolls and new dolls—all were represented; there was the North Holland peasant woman; the lady of 1855, with skirts rather too short and other garments too long; the imitation Red Indians; a doll that belonged to the daughter of the great Huygens; another (with a movable head) that was the property of an estimable lady who played with it nearly two centuries ago; the model of a Venetian lacemaker; another of a Russian country-house, with furniture and doll inhabitants, and other playthings too numerous to mention. Other contents of this magazine include a continuation of the sketch of Dutch social life in former days and a description of a country retreat built nearly two hundred years ago.

SCANDINAVIAN MAGAZINES.

BRITTANY is suffering a severe famine owing to the failure of her sardine fishery, and the French papers are full of heartrending accounts of the bitter trials and privations of the unhappy victims. The Stockholm magazine, *Varia*, gives in its February number a charmingly poetical description of Brittany's stoical sons of the sea and their characteristics. The article is written by a Swedish lady recently returned from a sojourn among these interesting "loups de mer," and is illustrated with some extremely pretty photographs.

The nursing home in Drammen, Norway, which recently attained its twenty-fifth year, is sketched in *Nylande* (No. 5). The institution was founded on March 15, 1878, and was then confined to one small rented room and the care of one little baby. Its founderess was a Miss Svenda Holst, a petted child of fortune, the daughter of a factory-owner named Svend Holst. She was a lively, much-fêted, trouble-free young lady, greatly given to sporting amusements, a very unusual trait in those days. The death of an extremely dear young friend gave, however, a more serious turn to her thoughts, and opened her eyes to the many sorrows of life and the evils that needed remedy. The nursing home appears to have been her first important philanthropic effort. A year after it was started, thirteen children had been taken charge of. The house became too small, and in the autumn of 1879 another was bought for the purpose by herself and a goldsmith (now dead) named O. Hoshre. Miss Holst then betook herself to Germany, there to study the subject of nursing homes thoroughly. Meanwhile, her family of other people's children went on increasing fast, and in 1891 the present home was bought,—a fine large, solid building, with healthy, airy rooms well adapted for their purpose. About one hundred and seventy-six children have been cared for here, leaving at about the age of eleven.

THE SPRING OUTPUT OF FICTION.

HISTORICAL NOVELS AND STORIES OF ADVENTURE.

The spring output of fiction is little more than a third of that at Christmas, but within these narrower limits historical romances and tales of adventure still easily maintain their numerical superiority. Recent months have brought forth no single work of this nature of dominant importance or success; but, on the other hand, there is no lack of well-written interesting tales picturing humanity in other times or under unusual and romantic conditions.

Worthy of first mention in this category is "The Captain," by Churchill Williams (Lothrop), who a year ago achieved considerable success with his first book, "J. Devlin—Boss." His later novel is an attempt to present a study in fiction form of conditions in the border States at the outbreak of the Civil War and during the early years of the conflict. Of chief interest to the maturer class of readers will be the excellent picture given of Grant, the unnamed but easily recognizable hero of the book.

Two other novels treating of the same much-exploited period are "The Master of Warlock" (Lothrop), by George Cary Eggleston, and "A Virginia Girl in the Civil War" (Appleton), which purports to be the "record of the actual experiences of the wife of a Confederate officer" during the great struggle, collected and edited by Myrta Lockett Avary, to whom they were related at a later date. Mrs. Avary's book is valuable as the contribution of an eye-witness of the events described, and it bears the earmarks of first-hand knowledge.

Also written from the Southern point of view is "Before the Dawn" (Doubleday, Page & Co.), the new story by Joseph A. Altsheler, author of "In Hostile Red" and other popular romances. The scene of the novel is Richmond just previous to its surrender, and a number of the leaders of the Confederacy play important parts in the story.

Virginia is a favorite and oft-worked field of the romancers, but in the latest story, "Children of Destiny" (Bobbs-Merrill), Miss Molly Elliot Seawell shows that its ore has not yet been exhausted. It is the Virginia of eighty years ago of which she here treats, in calmer manner than customary in historical novels, and with much skill in character-drawing and description.

Likewise Southern in character, but of widely different nature from the foregoing, is George Cram Cook's novel, "Roderick Taliaferro" (Macmillan). It is the story of a young Southerner who scorned to submit to the federal Government at the close of the Civil War, and who therefore proceeded to Mexico to enlist in the service of the unhappy Maximilian. Not a moment's pause is there in the rush of adventures from the first to the last page.

The scene of Mrs. Amelia E. Barr's latest novel, "The Song of a Single Note" (Dodd, Mead & Co.), is New York during the last four years of the Revolution; but history and geography, and everything, indeed, is made secondary to the all-absorbing theme of love, which is here treated in the good old-fashioned manner of the late Charlotte M. Yonge and Miss Muloch and other writers of a former generation. The same may be said in regard to Mrs. Barr's second new story, "Thyra Varrick" (J. F. Taylor); but in the intervals of love-

making the author manages to convey considerable information about Scotland at the time of the Young Pretender.

We have been treated in superabundance, of late, to romances dealing with the person of Aaron Burr, but in "The Stirrup Cup" (Appleton), J. Aubrey Tyson nevertheless has succeeded in producing a fresh, pretty tale about the much-bewritten "boy hero of Saratoga." The story, which is short, tells of Burr's successful courtship, during the later years of the Revolution, of the pretty widow, Theodosia Prevost, who had been set the task of bringing him, the young colonel, to her feet, for the purpose of extracting information from him for her English friends.

Equally American in spirit and treatment is Mr. Carter Goodloe's stirring romance, "Calvert of Strathore" (Scribners), although the scene of the story is France just previous to the Revolution. A large number of historical personages, American as well as French, are introduced to the reader.

"Under the Rose" (Bobbs-Merrill), on the other hand, the new venture of Frederic Isham, author of "The Strollers," relates the adventures of maid and knight in motley at a time when there cannot be said to have been either America or Americans,—namely, during the troublous times of the Emperor Charles V. The action plays mainly about the gay court of Francis I. of France; in its wealth of surprises and stirring adventures, it is a worthy rival of "The Helmet of Navarre."

The novels of Agnes and Egerton Castle are always frankly of the romantic, but never of the swashbuckler order. Their latest story, "The Star Dreamer" (Stokes), is an English tale of the time of George IV., and its interest lies more in the interplay of the various characters

of the book on each other, and less in thrilling incidents, than is commonly the case in the writings of these authors.

In "The Triumph of Count Ostermann" (Henry Holt), Mr. Graham Hope has woven a romantic tale about the person of the German, Heinrich Ostermann, who enlisted in the service of Russia and rose to be foreign minister under Peter the

Great. The story gives a trustworthy picture of the Russia of that day.

Of late years, the chief aim of Mr. Rider Haggard seems to have been to persuade city dwellers, willy-nilly, to return to country life and occupations, a desideratum which he has sought to bring about by precept and example. But there still occasionally issues from his Norfolk home a thrilling romance to remind us that the author of "She" has not entirely abandoned his first love. The latest output of his facile pen is "Pearl Maiden" (Longmans), a tale of Jerusalem mainly at the time of the Emperor Domitian. A prominent part is



EGERTON CASTLE.

played in the story by the interesting Jewish sect of Essenes.

Considering the perennial interest attaching to Old Testament times, it is remarkable that so few novelists have made use of this period of history as a setting for romance. "By the Ramparts of Jezreel" (Longmans) is an entertaining and instructive story of the reign of Jehoram and Jesebel, and of their downfall at the hands of Jehu.

A NEW NOVEL FROM A. S. HARDY.

It has been many years since anything has come from the pen of Mr. Arthur Sherburne Hardy, author of those delightful stories, "Passe Rose" and "But Yet a Woman." The many readers who learned to admire him through these novels hail with immense pleasure the advent of a new story, "His Daughter First" (Boston: Houghton, Mifflin & Co.), which Mr. Hardy has found time to write in the midst of his diplomatic duties as our minister to Persia, and, more recently, minister to Spain. "His Daughter First" is a keen, fairly balanced character study of a half-dozen New Yorkers, and a delightfully readable story withal. In Mr. Hardy's quiet, high-bred, and sensitive attitude toward life and people one is reminded of Mr. Henry James, even if there is none of the baffling, though fascinating, intricacies of style that distinguish the author of "Daisy Miller." And if Mr. Hardy's book is essentially a story of gentlefolk written by a gentleman, it is also a story of very human characters, drawn by a man whose refinement costs him no strength or truth. Jack Temple, the clean-cut, successful aristocrat of Wall Street; his daughter, full of eternally feminine inconsistencies; the gentlewoman that Temple loves; Heald, the promoter, and Mrs. Fraser, the abrupt and self-sufficient cosmopolitan dowager, are live and in-



ARTHUR SHERBURNE HARDY.

teresting people created by no inconsiderable artist in fiction. And what a relief, in this year of our Lord, and of adventure stories, to get one's dramatic sensations in this quiet, certain atmosphere of Mr. Hardy's genius!

NOVELS OF SERIOUS IMPORT.

Easily the most discussed book of the present season is "Lady Rose's Daughter" (Harpers), by Mrs. Humphry Ward, the well-known English authoress. Anything by the author of "Robert Elsmere," of course, is sure to attract attention, but in the present instance there



MRS. HUMPHRY WARD.

has been a second cause for the widespread interest in the book. Several recondite persons early discovered that Mrs. Ward had obtained the suggestion for her story ready-made from the "Mémoires" of Mlle. de Lespinasse, whose relation to Mme. du Deffand in real life was the same as that of Julie Le Breton to Lady Henry in fiction. This appropriation has aroused much comment and some criticism, which is chiefly valuable in drawing attention to an excellent novel, for in her latest story of English high life Mrs. Ward has gained a plane of objectivity which she had hitherto failed to achieve.

Probably the last novel which we shall have from the pen of the late Emile Zola is "Truth," which recently appeared with the imprint of John Lane. No more appropriate literary testament could the defender of Dreyfus have left to the world than this book, in which he arraigns those elements in French civilization that he holds responsible for the nation's moral deterioration, and in which he makes a plea for the reorganization of society on a rationalistic basis. The story is that of Dreyfus placed in clerico-educational circles, not in the army, as it is the Roman Catholic Church which the great realist looks upon as primarily guilty in this affair, as in many others. The book is didactic, but nevertheless intensely interesting and of moment to all concerned with problems of education.

In "Roderick Clowd" (Dodd, Mead & Co.), Josiah Flynt continues his striking studies of the criminal classes, to the delineation of which he has devoted his life. This is the life-story of a "successful" thief, and the unstated but clearly demonstrated thesis of the book is the responsibility of society for the existence of those who prey upon them.

"What Manner of Man" (Bobbs-Merrill), by a new writer, Edna Kenton, recalls in general manner,

"Gwenn," that deservedly popular story of fifteen years ago. The relation of the selfish, absorbed artist to the innocent, ingenuous peasant girl is the same in each case; but in the later story the problem is worked out in a northern clime and in a manner more congenial to a public which demands the satisfaction of final moral edification, at least.

From the standpoint of the pastor, Mr. Bradley Gilman has told a story in his novel "Ronald Carnaqua" (Macmillan) which recalls in certain aspects Harold Frederic's masterpiece, "The Damnation of Theron Ware." Each is the history of a minister absolutely unsuited, spiritually, to his calling, but the problem is worked out in very different manner by the two authors. Only personal knowledge of the petty jealousies and ambitions of a would-be fashionable congregation could have suggested the well-defined types of Mr. Gilman's story, which, like its predecessor, is American.

There is a moral problem at the base of William Farquhar Payson's novel "The Triumph of Life" (Harpers),—it is the spiritual salvation of the hero of the book, a successful writer who achieves seeming success at the cost of his better nature.

THREE TALES OF MYSTERY.

In "The Filigree Ball" (Bobbs-Merrill), Anna Katharine Greene again succeeds in developing an absorbingly interesting murder plot with her old-time skill, which for a while seemed to have deserted her. The story plays in Washington.

A new writer in the field of mystery is Frances Powell, who makes her debut with the book of the suggestive title "The House on the Hudson" (Scribners), which develops the love *motif* more prominently than is customary in detective stories.

There seems to be a divergence of opinion as to whether "The Life Within" (Lothrop), by an anonymous author, shall be attributed to a Christian Scientist or to a clever outsider who has seen the commercial advantages of a novel dealing with the new cult. The scene of the story is Kentucky, and it must be admitted that considerable restraint is manifested in the presentation of Christian Science doctrines and "miracles."

STORIES PICTURING THE LIFE OF LOCALITIES.

In contradistinction to the perennial interest attaching to tales of adventure and fighting is the equally strong though quieter interest aroused by stories depicting the life and character of more or less obscure communities. Of these, the abiding prototype is Mrs. Gaskell's "Cranford," but each season brings forth a number of such studies of provincial life worthy of serious consideration. "Putnam Place" (Harpers), by Grace Lathrop Collins, pictures in quiet, subtle manner the narrow, intense life of a New England village, whose quarrels and loves and jealousies the author renders vividly interesting. Equally successful in the same field is Elmore Elliott Peake in his novel "The Pride of Telfair" (Harpers), in which he depicts with much insight the life of a small Illinois town. Of somewhat different nature from the foregoing is "Lovey Mary" (Century), the new story by Alice Hegan Rice, author of "Mrs. Wiggs of the Cabbage Patch," in that it does not pretend to be an exhaustive study of a community, but merely an amusing peep into one corner of Louisville's most obscure quarter. Mrs. Wiggs, with her quaint sayings, reappears in this book, together with other old friends.

In "The Substitute" (Harpers), Will N. Harben continues his studies of North Georgia types, which attracted attention in "Abner Daniel." A story of a quaint religious community in one of the Western States is "Walda" (Harpers), by Mary Holland Kincaid, in which the conflict arises between love and the heroine's clearly defined duty as prophetess of the peculiar sect that frown upon love and marriage.

Three excellent though widely divergent books on Canadian life are "Glengarry School Days" (Revell), by Ralph Connor; "In the Garden of Charity" (Harpers), by Basil King; and "Conjurer's House" (McClure, Phillips & Co.), by Stewart Edward White. In a sense, the first of these is a continuation of "The Man from

Glengarry," in that several of the characters of that story reappear in this one; but, on the other hand, it is a tale of the primitive community from the boy's point of view, rather than from that of grown-ups. Mr. King's novel is radically different from his first book, "Let Not Man Put Asunder," being a picture of the simple fisher-folk of Nova Scotia, against which background is projected a tragic story of love and fidelity and faithlessness. Mr. White's book is the stirring account of a man who defies



STEWART EDWARD WHITE.

the monopoly of the Hudson Bay Company and persists in trading with the Indians regardless of the company's time-honored but no longer legally recognized rights.

In the present category of novels must be reckoned "A Summer in New York" (Henry Holt), by Edward Townsend, author of "Chimmie Fadden," since the story may be regarded as a guide, in fiction form, to the pleasures of the metropolis during the hot season.

Mrs. Henry Dudeney's latest novel, "Robin Brilliant" (Dodd, Mead & Co.), possesses to the full charm of local color and rustic simplicity, being a quiet tale of Sussex, written with much insight into human motives and character, and with a pleasant fillip of humor. Of somewhat similar nature is Elsworth Lawson's story of Yorkshire life, "From the Unvarying Star" (Macmillan), but with a certain justice it may be objected that there is lacking in this novel the restraint which keeps sentiment from becoming oppressive.

STORIES OF THE SEA.

Both Frank Bullen and Joseph Conrad have given us, this year, new stories of the sea; not stories simply about the sea, such as any landlubber of imagination can write, but stories with the smell and sweep of the ocean in them. Mr. Bullen, who is of English birth but American education, first gained popularity with "The Cruise of the Cachalot," which was a simple, straightforward account of a whaling voyage, full of adventure, but without love, or anything else extraneous to the tale. In his recent book, "A Whaleman's Wife" (Appleton), he has introduced the conventional elements of the novel, not even omitting the villain and the disappointed lover. There is, however, no lack of purely pelagic elements. Mr. Conrad's book is a collection of three long

short-stories, and it takes its name from the first and shortest of these, "Youth" (McClure, Phillips & Co.). The tales are all primarily of the sea, although not exclusively so, as a number of the adventures recounted take place on land. There is a charm and power in this collection which go far to justify the extravagant predictions of the author's admirers. Interesting in this connection is the fact that this master of picturesque English was born in Poland, and that he did not leave that country until he went to sea.



JOSEPH CONRAD.

VOLUMES OF SHORT STORIES.

Collections of short stories are said to be, commercially speaking, a drug on the market, and are accepted by publishers only under protest. This accounts for the small number of such collections, and for the fact that they usually bear the name of a well-known author. Mrs. Mary Wilkins-Freeman, or, as she is better known, Miss Mary E. Wilkins, challenges our approval with two separate collections, each containing six stories, mainly of New England setting. In "Six Trees" (Harpers), she weaves the tales in every case about some particular tree, which is made typical of the special phase of life depicted in the story. "The Wind in the Rose-Bush" (Doubleday, Page & Co.), on the other hand, is made up of good old-fashioned ghost stories, which were generally supposed to have gone out of fashion some time ago. They are told, however, with ease and conviction.

There is general agreement that the fairest flower of the genius of Henry James is seen in his short stories, and this contention is sustained by the perusal of his latest collection, "The Better Sort" (Scribners). Needless to say, in the nine stories here brought together the psychological note is dominant, but there is a delicacy and freshness in the volume which go far to compensate for the prolixity of "The Wings of the Dove" and "The Awkward Age."

Of essentially American character, although extremely varied in subject, are the stories gathered together by Arthur Colton under the name of "Tioba" (Henry Holt). Direct, humorous, full of action, they may serve as a delectable antidote to the hyperanalysis of Mr. James. Equally fresh and spontaneous is Sewell Ford's collection of equine stories, "Horses Nine" (Scribners); and in addition, it possesses literary qualities of a high order. In these stories, Mr. Ford has done nine separate times for the horse what Mr. Kipling did so cleverly for the locomotive in his story ".0003."

Mr. Israel Zangwill, author of "Children of the Ghetto," has recently appeared in the guise of poet, and he now bespeaks our suffrage with a collection of striking stories and novelettes bearing the title "The Grey Whig" (Macmillan). Of these, some are old and some new; "The Big Bow Mystery," one of the novelettes, it

may be recalled, was published a number of years ago by an enterprising English periodical, with a prize for the solving of the mystery before the appearance of the last installment.

"Cap'n Titus" (Doubleday, Page & Co.) is a short collection of interrelated tales of New England life, mostly humorous, by Clay Emery. Of more ambitious setting are the two artistic stories by Arthur Cosslett Smith, published under the title of the initial tale, "The Turquoise Cup" (Scribners). The scene of the first story is Venice; that of the second, the desert of Sahara.

SOME UNCLASSIFIED NOVELS.

Readers of novels have awaited with much interest the posthumous story, "The Conquering of Kate" (Doubleday, Page & Co.), of the writer who of late years chose to be known as J. P. Mowbray, although his rightful name was Andrew C. Wheeler and he had long since attained fame as a humorist under the pseudonym Nym Crinkle. Mr. Wheeler's story, which is laid in Franklin County, Pennsylvania, after the Civil War, has the same qualities of rural freshness and love of nature which made popular "Tangled Up in Beulah Land" and "A Journey to Nature."

"Journey's End" (Doubleday, Page & Co.), by Justus Miles Forman, is a story with a glimpse of the stage door in it, and which has enjoyed considerable vogue, despite, or perhaps in virtue of, its flimsy character. Also of slight structure, but quite amusing, is Dr. Weir Mitchell's little volume, "A Comedy of Conscience" (Century), which recounts the tribulations of a spinster lady with an unduly loud warning voice in her breast.

Two books dealing with college life, although, to be sure, in very different ways, are "When Patty Went to College" (Century), by Jean Webster, and "The Chameleon" (McClure, Phillips & Co.), by James Weber Linn. Miss Webster's book is a collection of humorous incidents of girl-student life, each complete in itself, but correlated; while in Mr. Linn's story the college scenes are secondary to the development of the thesis of the book, which is the punishment awaiting him who by nature is incapacitated from speaking the truth. The "Chameleon's" punishment, however, it must be admitted, strikes one as rather severe for the mildness of his "fibs."

"From a Thatched Cottage" (Crowell), by Eleanor G. Hayden, is a successful attempt to depict English country low life in the evolution of a story based upon crime and its effect upon the innocent descendants of the guilty one and his victim. Also dealing with murder, but among the less interesting lower middle class, is "The Stumbling Block" (Barnes), by Edwin Pugh. It is a tale such as George Gissing might have written—with greater carrying power.

In "The Bishop" (Harpers), that most prolific of contemporary writers, Cyrus Townsend Brady, attempts to picture the West in a series of experiences, amusing and otherwise, grouped about the figure of the church dignitary. Like his other books, it shows inventive fertility and a certain dramatic and pictorial power.

"Veronica" (Doubleday, Page & Co.), by Martha W. Austin, is described by the publishers as a "story of feeling and not a tale of adventure." It is a love story, the scenes of which are laid mostly in Louisiana; but it is the geography of the heart, not that of the State, which the author seeks to teach.

OTHER BOOKS OF THE SEASON.

NATURE-STUDY AND OUT-OF-DOOR LIFE.

A "bird book" that is by no means lacking in the quality of human interest is Mr. William E. D. Scott's "Story of a Bird Lover" (New York: The Outlook Company). Mr. Scott is curator of the department of ornithology of Princeton University. In his house at Princeton, he maintains a laboratory of six rooms, con-



MR. WILLIAM E. D. SCOTT.

taining about five hundred live birds, native and foreign. Mr. Scott has made this collection for the purpose of conducting investigations that may lead to a better understanding of birds in their natural environment and of problems that arise in their out-of-door life. We mention this fact in this connection by way of showing that Mr. Scott's work is of an original and almost unique order, and the glimpses of it that he gives us in his book tend to justify fully the statement made in an introductory note by his publishers that he has done much to bring the life of birds nearer to the life of man, and has established—so to speak—personal relationships with the whole bird kingdom. A graduate of Harvard, where he had been a pupil under Louis Agassiz, Mr. Scott for some years followed the taxidermist's calling; and later, after his connection with Princeton began, he made journeys all over this country studying the life and character of birds in their natural surroundings. The simple story of his life, of which this sympathetic nature-study has been so great a part, makes up the volume before us. We can cordially recommend the book, not only to students of bird life, but to all readers whose interests are in the direction of out-of-door study and observation.

A very complete "Handbook of Birds of the Western United States" (Houghton, Mifflin & Co.) has been compiled by Mrs. Florence Merriam Bailey. This book

does for the Western half of our country what Mr. Frank M. Chapman's handbook has done for the Eastern States. It gives descriptions and biographical sketches of all our Western birds, including all the American species not treated by Chapman, besides those which are common to both sections of the country. Mrs. Bailey has worked in California three years, and has also spent some time in Utah, Arizona, Texas, and New Mexico. The book has over six hundred illustrations, including thirty-two full-page plates from drawings made expressly for it by Louis Agassiz Fuertes. The introduction includes several practical papers, notably one by Mr. Bailey on collecting and preparing birds, nests, and eggs, and suggestions on bird-protection by T. S. Palmer, besides several valuable local lists of birds.

Many of our readers will doubtless recall a charming little book bearing the rather blind title "Mr. Chupes and Miss Jenny" which appeared a year or two ago and was noticed at the time in these pages. This book was the life-story of two robins, and the author, Mrs. Effie Bignell, has been encouraged to write another little volume of bird-lore which she has entitled "My Woodland Intimates" (Baker & Taylor Company). The region in which Mrs. Bignell's bird studies have been made is in eastern New Jersey, although in the present volume occasional excursions are made to the Laurentian Mountains of Canada.

Prof. Harris H. Wilder, of Smith College, has prepared "A Synopsis of Animal Classification" (Holt), which is designed as an aid to students and teachers in zoölogy in our schools and colleges.

"A Prairie Winter," by "An Illinois Girl" (New York: The Outlook Company), is a sort of journal of observations made from day to day, beginning in the autumn and continuing through winter and spring. Some of the facts and inferences here recorded seem inconsequential and irrelevant, but, on the whole, there is much that is suggestive of prairie life out-of-doors in the most inclement seasons, and much that will interest all who have ever lived in the country, whether East or West.

An "Introduction to Botany" has been written by Prof. William Chase Stevens, of the University of Kansas (Boston: D. C. Heath & Co.). This book is intended for use in high schools, and while it is sufficiently comprehensive to provide a full year's work for such schools as devote that amount of time to the subject, the material has been arranged in such a way that schools devoting less than a year to the study may have a thoroughly symmetrical and adequate introductory course. Special attention is devoted to the study of common flowering plants that may be easily procured during the spring and early summer in almost every locality.

The publication within a few months of each other of two books entirely devoted to hardy plants for gardens and lawns indicates the increased interest that is taken of late in this branch of landscape gardening. Miss Helena Rutherford Ely, in "A Woman's Garden" (Macmillan), which has already reached the third edition, tells how to prepare the soil, lay out the garden and borders, bed and plant the seeds, and arrange for a constant succession of flowers from April to November. The volume is illustrated from photographs taken in the author's garden by Prof. C. F. Chandler. Mr. J.

Wilkinson Elliott's "Plea for Hardy Plants" (Double-day, Page & Co.) represents a landscape architect's attempt to teach, not the art of landscape gardening, but the need of it. Mr. Elliott directs our attention to the prevalent folly of intrusting the treatment of grounds surrounding costly houses to "the nearest two-dollar-a-day jobbing gardener," although for the designing and planning of the house itself an architect is usually employed. It is Mr. Elliott's conviction that while 50 per cent. of the cost of the better class of houses in this country is expended with the desire of producing beauty, one dollar intelligently spent on the ground will afford more beauty than ten spent on the house, and the attractiveness of the house is greatly enhanced by the beauty and fitness of the grounds. Mr. Elliott makes his points by the aid of good pictures.

An excellent "Woodsmen's Handbook," by Director Graves, of the Yale Forest School, has been issued by the United States Department of Agriculture. The purpose of this book is to give a collection of tables and rules of practical use to lumbermen, foresters, and others interested in the measurement of wood and timber. Only such information as is deemed of immediate practical value to American woodsmen is included. The first volume comprises rules for finding the contents of logs, standing trees, methods of estimating timber, a brief outline of forest working plans, and a description of instruments useful in the woods. It is the author's intention to include in the second volume directions for studying the growth of trees, tables of growth, directions for the study of future production of forests, tables showing the future yield of forests, and so forth.

"Variation in Animals and Plants," by H. M. Vernon, Fellow of Magdalen College, Oxford (Holt), is a treatise that can only be understood and appreciated by the experienced naturalist. The botanical side of the subject is treated with less fullness in this work, owing to the author's greater familiarity with animals than with plants, and hence his more thorough acquaintance with the literature of animal life. Scientists will find the chief value of the book, 'perhaps, in the full accounts that it gives of the author's own researches, although due recognition is given to the work of other investigators.

Of a more popular character is the interesting illustrated volume on "Animals Before Man in North America," by Frederic A. Lucas (Appleton). Owing to his official position as curator of the Division of Comparative Anatomy in the United States Museum, at Washington, Mr. Lucas has had unusual facilities for the study of his favorite subject, and he possesses in an unusual degree the ability to write entertainingly upon scientific topics. The plan of his book involves the treatment of the history of the past by periods. Mr. Lucas has endeavored to sketch the characteristic or more striking features of the life of well-marked epochs, and to tell something of the habits, appearance, and relationships of the more conspicuous animals. In doing this, he calls attention to some of the causes that are believed to have brought about the marked changes that have taken place in the life of our continent and in the world generally, and at the same time imparts some of the varied information that has been obtained from the study of fossils. Some of the localities where fossils are to be found are described, and some account is given of the methods followed in reproducing these animals and interpreting their habits from a study of their bones.

A study of the prehistoric world from an astronomer's point of view is interpreted by Sir Robert Stawell, Bart., of the University of Cambridge, England, in a volume entitled "The Earth's Beginning" (Appleton). This volume treats of the evolution of the earth, the planets, and the sun from the fire-mist. The volume is really made up of lectures given before the Royal Institution of Great Britain and adapted to an audience of young people. It is strictly a popular exposition of the subject, well illustrated, and fitted for supplementary reading in school and college classes.

A capital elementary work covering the whole field of natural science is Prof. Edward S. Holden's "Real Things in Nature" (Macmillan). This work treats, in the successive parts, or books, of astronomy, physics, meteorology, chemistry, geology, zoölogy, botany, the human body, and the early history of mankind. Questions likely to be asked by the average American boy concerning railways, electric lights, the telegraph, telephone, and so forth, are answered in the section on



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physics. In this and the other sections of the book, it is, of course, impossible to give complete or satisfactory explanations in every instance. Professor Holden has endeavored, however, in every case, to make the explanations complete so far as they go. As certain scientific ideas are evidently too difficult to be grasped by young minds, it has seemed wiser to omit such topics altogether. In the department of chemistry, a few fundamental ideas are presented, enforced by a few safe and simple experiments, while the rest of the science is left untouched. The author insists on the fundamental ideas of science and its methods, using the facts chiefly as means of illustrating his mode of thought.

Mr. Francis M. Ware's "First-Hand Bits of Stable Lore" (Boston: Little, Brown & Co.) is a practical book which meets the needs of the amateur horse-buyer and stable owner or manager. It has some excellent chapters on such topics as "The Horse's Education," "Mouths and Manners," "The Foot and Its Treatment,"

"The Saddle-Horse," "The Hunter and His Education," "Riding for Women and Children," "Four-in-Hand Driving," "Coaching and Its Accompaniments," and "Management of a Pack of Hounds." Mr. Ware is well known as the manager of the American Horse Exchange, in New York City, and for many years has been identified with the leading horse-show organizations throughout the country.

Mr. Henry Rankin Poore's book on "Pictorial Composition" (Baker & Taylor Company) is full of suggestions to the amateur photographer and to the student of painting. The man who desires to excel in landscape work, whether with the camera or the brush, will do well to pursue Mr. Poore's chapters on "Balance," "Evolving the Picture," "The Circular Observation of Pictures," "Light and Shade," and so forth.

"The A B C of Photo-Micrography," by W. H. Walmsley (New York: Tennant & Ward, 287 Fourth Avenue), is designed as a practical handbook for beginners. It is perhaps the only elementary treatment of the subject in existence. The writer has taken great pains to explain many of the things a knowledge of which is presupposed in more elaborate works.

Mr. Edward W. Newcomb has written a little book entitled "How to Improve Bad Negatives" (New York: Published by the author at the Bible House). In this little manual, an attempt is made to give the best methods used by photographers in their modern practice, methods which the writer believes will enable any one to turn bad, unprintable negatives into choice ones.

"The Photo-Miniature" continues to be issued monthly (New York: Tennant & Ward, 287 Fourth Avenue). Each number of this publication, as we have explained in former notices, is devoted to some single topic related to the art of photography. In the last number, for example, the "Kallitype Process" is described. Previous numbers are devoted to such topics as "Development Printing Papers," "More about Orthochromatic Photography," "Coloring Photographs," "Photographic Chemicals," "Copying Methods," "Photographing Animals," "Color Photography," "Film Photography," and so forth.

NEW VOLUMES OF BIOGRAPHY.

In Appleton's "Historic Lives" series, a volume on "Horace Greeley" has been contributed by Mr. William Alexander Linn. No other American journalist of his own generation or of this has so interested the American public as did the eccentric editor of the *Tribune*. All the earlier biographies of Greeley were such as the readers of the *Tribune* delighted to read. They were largely anecdotal, and to a certain extent eulogistic; but as estimates of Greeley's career and influence, they were decidedly lacking in the judicial quality. This lack has been fully realized by Mr. Linn, who has written a life of Greeley which differs in a marked degree from any of its predecessors. Mr. Linn seems to have recognized Greeley's shortcomings quite as distinctly as he recognized his merits. In his analysis of the great journalist's conduct during the Civil War, he is unsparing and merciless. His earlier chapters on the founding of the *Tribune* and the sources of the *Tribune's* influence, however, as well as the chapter on the anti-slavery contest, give full credit to Greeley for the preëminent virtues and abilities that he displayed in those years. Yet Mr. Linn feels compelled to say of Greeley's journalistic work as a whole: "His weaknesses throughout his editorial career are almost as

marked as his strength, and a lack of foresight often played havoc with his judgment."

Another eminent American about whom much has been written is William Ellery Channing, the subject of a new biography by the Rev. John White Chadwick (Houghton, Mifflin & Co.). Students of the anti-slavery conflict are already familiar with Channing's part in that struggle. No biographer could expect to add very much to the general knowledge of that subject. Of more immediate interest, in view of the present tendencies in liberal religion, is Channing's criticism of these tendencies as reviewed by Mr. Chadwick.

Two volumes of "New Letters and Memorials of Jane Welsh Carlyle" now appear under the editorship of Alexander Carlyle, with an introduction by Sir James Crichton-Browne (John Lane). These volumes contain many letters that were rejected by Mr. James Anthony Froude in compiling the three volumes of Mrs. Carlyle's letters and memorials which were published some years ago. The writer of the introduction to this new selection seizes the opportunity to defend the fame of Thomas Carlyle against the assaults that he believes to have been made upon it by Mr. Froude's "Reminiscences." The main purpose of the present publication seems to have been to vindicate the memory of Carlyle against aspersions and insinuations that have passed current since his death in regard to his domestic relations.

"British Political Portraits" is the title of a volume of character sketches of men prominent at the present time in the public affairs of England, by Justin McCarthy (New York: The Outlook Company). Mr. McCarthy has had a long experience in Parliamentary life himself, and writes from intimate personal knowledge of such political leaders as Mr. Balfour, Lord Salisbury, Lord Rosebery, Joseph Chamberlain, John Morley, John Burns, Sir Michael Hicks-Beach, John E. Redmond, Sir William Vernon Harcourt, James Bryce, and Sir Henry Campbell-Bannerman. Mr. McCarthy has the journalist's faculty of seizing on those traits in the subjects of his sketches that are most likely to interest the reading public, and the journalist's facility in description.

People with a keen scent for literary sensationalism made much of the recent discovery that Mrs. Humphry Ward, in her novel "Lady Rose's Daughter," very closely paralleled the career of Mlle. de Lespinasse, whose letters were published in translation a year or two ago by the Boston house of Hardy, Pratt & Co. Whoever is interested in tracing the parallelism will find entertainment, if not profit, in perusing this translation—the work of Katharine Prescott Wormeley.

The life of Luigi Alamanni, the Florentine poet who passed many years in exile at the court of France in the sixteenth century, has been written by Henri Hauvette (Paris: Librairie Hachette & Co.). It is by no means inappropriate that a Frenchman should be the biographer of this Italian writer, since it was in France that Alamanni passed the greater part of his life, and at the French court were written or published all the works by which he is now known.

The two most interesting characters of the nineteenth century, according to Mark Twain, are Napoleon and Helen Keller. Miss Keller's remarkable book, "The Story of My Life" (Doubleday, Page & Co.), is a record of achievement that can hardly be compared with any human experience—even Napoleon's. When were such difficulties ever so completely mastered in a

brief score of years? This girl, deprived in infancy of sight, hearing, and power of speech, is an educated woman at twenty-three, a graceful and effective writer, a student of literature, and a witty conversationalist. Miss Keller herself cannot tell how all this has been brought about. Much has been due to the skill and tact of her teacher, Miss Sullivan. The publishers



Affectionately yours
Helen Keller

have done well to include in the volume the reports and letters of this faithful and efficient instructor, and the cause of blind and deaf-mute education is undoubtedly the gainer by the publication of this material. The editor of the volume, Mr. John Albert Macy, adds an interesting account of Miss Keller's education, including an exposition of her methods of writing, her speech, and other details of a most attractive personality.

WORKS OF REFERENCE.

The eighth volume of "The New International Encyclopædia" (Dodd, Mead & Co.) has now been issued, and it is possible to form some conception of the general characteristics of the work as a whole. Of the special features to which we have alluded in former notices, the department of geography is well maintained in all the volumes that have thus far appeared. A notable illustration of the geographical thoroughness of the work is the elaborate article in the seventh volume on "Europe." This is illustrated by a physical map of Europe on which is shown, for the sake of comparison, a map of the State of Pennsylvania drawn to the same scale. In addition to this map of the physical features of the continent, there is a general map of the political divisions as they are to-day, together with historical

epoch maps showing the political divisions at the time of Charlemagne, about 1500 A.D., at the time of Napoleon's power, in 1812, and after the Congress of Vienna, in 1815. The other geographical articles in the seventh and eighth volumes are developed on similar plans.

The third volume of "The Jewish Encyclopedia" (Funk & Wagnalls Company) completes the letter B and makes a beginning on the letter C. If the work is maintained on this scale throughout, it would seem that more than the twelve volumes announced will be required for its completion. What especially distinguishes this third volume is the remarkable contribution that it makes to biblical science. There are articles on the Bible canon, Bible editions, biblical exegesis, Bible manuscripts, the Bible in Mohammedan literature, Bible translations, and biblical ethnology. It is announced by the publishers that other articles relating to the Bible,—namely, Bible concordances, Bible dictionaries, Bible inspiration, and Bible text,—will be treated in subsequent volumes. Notwithstanding the fact that most of the biblical commentaries of the nineteenth century were written by Christians, it is clearly brought out in the article on Bible exegesis that the Jews were the real founders of this science. The writer concludes his survey of the vast exegetical literature that has been accumulated by the Jews with the regret that the Jewish scholars of the nineteenth century have not maintained the high standard of their predecessors.

A useful volume entitled "Scientific Side-lights" has been compiled by Mr. James C. Fernald (Funk & Wagnalls Company). These side-lights are quotations from eminent writers on scientific subjects, arranged alphabetically and numbered. No digests or summaries are made, but the exact language of the author is given without note or comment. A high degree of skill has been required in the successful compilation of such a work, and the result has fully justified the claim of the publishers that "all the tiresome work has been done for the reader by the editor,—the authors have been selected, the volumes read, the dull parts skipped, and wherever a bright gem was hidden, it has been picked up and set so as to catch the light."

"All the World's Fighting Ships," edited by Fred. T. Jane (New York: Munn & Co.), is an annual giving statistical and graphic information about the world's great navies, together with authoritative articles on naval progress. The book is indispensable for editors and others who would keep pace with the rapid growth of the world's great naval armaments. The author is well known as the originator of the naval war game, now played by all the navies of the world.

The "Atlas of the Geography and History of the Ancient World," edited by John King Lord (Boston: Benjamin H. Sanborn & Co.), is a book that should be of great service to the students in schools and colleges in helping to make clear the relation existing between the geography and the history of the ancient world. The maps that are included in this atlas show the general changes in the political geography and history of the ancient nations. The map of the peoples of antiquity is followed by others showing the rise of the Persian kingdom, the conquests of Alexander, and the governments of his successors. A series of maps show the changes in the political divisions, peoples, and governments that followed in Asia Minor, Greece, and lands about the Ægean; others present similar changes that mark the history of Italy; and the relations of

Rome and Carthage, the conquest of Gaul, Spain, and Germany, as well as the movements of the peoples in Central Europe, are shown in other maps. There are also maps of Egypt and Palestine, and the final map of the book presents the growth of the Roman Empire.

The annual edition of the English "Who's Who," the well-known biographical dictionary which is now in its fifty-fifth year of issue (Macmillan), has so increased in size that much of the statistical matter that formerly occupied the first part of the book has been removed to make room for the second and more important portion containing the biographies. The publishers state that they hope to reissue at a later date the material of this kind that has appeared in earlier editions of "Who's Who."

Mr. Robert Donald's valuable "Municipal Year Book of the United Kingdom" (London: Edward Lloyd, Limited) has been expanded from a volume of five hundred pages to one of nearly seven hundred. This enlargement has been made necessary, it appears, by recent developments in the work of local government in Great Britain. Sections of the book which indicate the greatest progress are those devoted to street railways, electric lights, telephones, and housing. As education is now municipalized in Great Britain, the editor has included in the year book for 1903 a complete digest of the Education Act. All the information and statistics have been thoroughly revised and brought up to date, it is said, and the attempt has been made to cover the whole field of municipal activity and to make the year book a municipal encyclopedia as complete as space will permit. A perusal of the book at once suggests the query why some such volume has not been planned to cover the municipal activities of the United States.

Another annual publication edited by Robert Donald is "The London Manual," now in its seventh year of publication (London: Edward Lloyd, Limited). This book aims to give a complete and popular account of how London is governed in all departments of public service. In the present volume, special attention is given to the subject of locomotion in London, housing, the working class, London's water supply, London's light, London's markets, London's post-office, telephones, and other great municipal problems now under consideration.

The New York State Library's "Comparative Summary and Index of Legislation for 1902" is a minutely classified summary of the new laws passed by all the States, including votes for constitutional amendments and decisions declaring statutes unconstitutional.

One of the useful publications of the American Library Association (Houghton, Mifflin & Co.) is the "Guide to the Study and Use of Reference Books," by Alice Bertha Kroeger. This is a manual for libraries, teachers, and students, which makes no pretensions to completeness, but includes in its lists the most useful works in the English language, and, with some exceptions, in other languages. Reference books limited to the use of specialists have been usually omitted.

"A Descriptive Guide to the Best Fiction, British and American," by Ernest A. Baker (Macmillan), includes translations from foreign languages, and contains altogether about forty-five hundred references, with copious indexes and an historical appendix. Some indication of the growing esteem in which American writers are held in Great Britain is afforded by the fact that in the present volume nearly one-quarter of the space given to fiction in the English language is claimed by American authors.

"An Italian and English Dictionary" has been compiled by Prof. Hjalmar Edgren, formerly professor of romance languages in the University of Nebraska, with the assistance of Giuseppe Bico, of the University of Rome, and John L. Gerig, of the University of Nebraska (Holt). This dictionary is based on the foremost recent authorities, and embodies a copious selection of modern words, as well as important obsolete ones, presented in practical and yet etymological form.

The "Dictionary of Philosophy and Psychology," edited by Prof. James Mark Baldwin (Macmillan), is completed with the second volume. The general scope of this work has been explained in a former notice. In the prefatory note to the concluding volume, the editor replies to one or two criticisms that have been passed



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on the work. He shows that, far from slighting Greek and Latin philosophy, a large amount of historical matter on classical thought is presented in this second volume. As to the treatment of biography in the dictionary, the editor's belief is that while no more than the proverbial half-loaf has been granted this department, still it was a case of part of the loaf or no bread. Each volume of this important work consists of about nine hundred octavo pages.

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 Asia, English and Russian Rivalry in, F. A. Ogg, Chaut.
 Astronomy, Current, and Its Publication, W. W. Payne, PopA.
 Astronomy: New Method of Obtaining Time, Latitude, and Azimuth for Field Work, W. E. Cooke, PopA.
 Atmospheric Strata, Law of the, W. E. Thomas, PopA.
 Australasia, State Arbitration in, H. W. Macrosty, PSQ.
 Australia, South, Land-Grant Railway of, J. H. Gordon, AMRR.
 Australia, South, State Socialism in, L. Katscher, JPEcon.
 Austria-Hungary, "Partition" of, E. Reich, Int.
 Automobile, The Coming of the, H. Norman, WW.
 Avalanches, Mrs. A. Le Blond, Pear.
 Babylon and Israel, R. D. Wilson, PTR.
 Bacteria, Influence of the Discovery of, in Relation to Disease—II., H. J. Lipps, San.
 Balkans, Unrest in the, M. T. Jonescu, General Tzontcheff, and M. P. Skatistivis, MonR.
 Ballooning as a Pastime, Gertrude Bacon, Bad.
 Bank Investment, Commercial Paper as, G. E. Bartol, BankNY.
 Banking: Increasing the Net Earnings, A. Hamilton, BankNY.
 Banks, National, Issue of an Asset Currency by, BankNY.
 Baskets, Pomo, The "Dan" in, C. Purdy, OutW, March.
 Batavia, Reminiscences of, R. A. Durand, Cham.
 Bears, When They Awake in the Spring, E. Mott, O.
 Beauty, Evolution of the Art of, Gent.
 Beet Sugar Culture on Utah Deserts, H. C. Myers, OutW.
 Berlin, The New, C. A. Luhnnow, NatM.
 Bernard, St., of Clairvaux, D. S. Schaff, PTR.
 Bernhardt, Sarah, Playwright, Arsène Alexandre, Lamp.
 Bible and Pulpit, W. Kelly, Luth.
 Bible: Is It More Familiar Than Formerly? A Symposium, Bib.
 Bible, Present Knowledge and Influence of the, Bib.
 Biologists, the Making of, T. D. A. Cockerell, PopS.
 Birds: How the Vireo Outwitted the Cowbird, A. R. Dugmore, CLA.
 Birds, How to Make a Garden for, Helen L. Jones, CLA.
 Birds: The Cuckoo, O. H. Latter, Corn.
 Birds: The Great Auk in Art, F. Bond, PopS.
 Björnson, Björnsterne, Louis F. Richards, Cos; W. M. Payne, Int.
 Blavatsky, Madame—II., T. de Mommerot, Revue, March 15.
 Blind, Association for Helping the, R. Hauptvogel, AJS.
 Bloch Museum of Peace and War, T. C. Thomas, Cham.
 Botrel, Théodore, K. L. Ferris, Crit.
 Brigands in Real Life, H. Vivian, Str.
 Briticisms of All Sorts, B. Matthews, Harp.
 Brittany, In Old, Anna S. Schmidt, Atlant.
 Brookville, Indiana, L. Knight, NatM.
 Buddha's Last Meal and the Christian Eucharist, A. J. Edmunds, OC.
 Buddhism and Christianity, T. W. Rhys-Davids, Int.
 Business Corporations, American, Before 1789, S. E. Baldwin, AHR.
 Butte City, Greatest of Copper Camps, R. S. Baker, Cent.
 Cables: How They Are Laid, Worked, and Mended, J. W. Davis, Gunt.
 California: Death Valley Party of 1849—II., J. W. Brier, OutW.
 California, The Builders of—Franciscan Period, M. Pixley, Over, March.
 Calumet and Hecla Mines, Romance of, S. E. Moffett, Cos. Canada:
 Colonial Naval Reserves, P. T. McGrath, Can.
 Commercial Independence, Growing, E. Wiman, NAR.
 National Policy, A. J. S. Willison, Can.
 Northwest, Americanization of the, W. R. Stewart, Cos.
 Parliament Buildings at Montreal, Burning of the, J. J. Bell, Can.
 Quebec, From, to James Bay, E. T. D. Chambers, Can.
 Railway, Trans-Canada, E. T. D. Chambers, AMRR.
 Railways, Transcontinental, N. Patterson, Can.
 Cannon, Joseph G., N. O. Messenger, Pear.
 Carducci, Giosuè, A. Tuscan Horace, W. B. Wallace, West.
 Caribbean, A Bit of Holland in the, W. Hale, Out.
 Carnegie Institution and the National University, J. H. Gore, PopS.
 Catkins: When They Bloom, C. M. Weed, NEng.
 Census-Taking, American, W. R. Merriam, Cent.
 Chapman, Robert Cleaver, A. T. Pierson, MisR.
 Chicago, Municipal Situation in, H. P. Judson, AMRR.
 Children of Labor, W. S. Waudby, FrL.
 Chinese Negotiations, Outcome of the, G. Reid, NAR.

- Christ and Revelation, Kaiser's Letter on, A. Harnack, Contem.
- Christ, The Condemnation of, A. Danziger, OC.
- Christian Science: Mrs. Eddy in Error, "Mark Twain," NAR.
- Christianity and the Natural Virtues, G. Tyrrell, IJE.
- Christ's Work in Redemption, A. C. Smith, Meth.
- Church of England: The Crisis in the Church, Viscount Halifax; The Church's Last Chance, Lady Wimborne; Loyalty to the Prayer-Book, G. Arthur; An Appeal to the Dean and Canons of Westminster, H. Handley, NineC.
- City, Flat-Dwellers of a Great, A. B. Paine, WW.
- City Transportation, Means of, G. d'Avenel, RDM, April 1.
- Clairvoyance and Clairaudience, W. J. Colville, Mind.
- Clark, George Rogers, and the Kaskaskia Campaign, 1777-1778, AHR.
- Coal Strike, Boston, B. O. Flower, Arena.
- Coal Strike, Anthracite, Echoes from the, G. F. Baer, CasM.
- Cogswell, William Browne, Sketch of, CasM.
- Coleridge, Hartley, J. K. Hudson, Temp.
- College, Christianity in the, D. W. Fisher, PTR.
- College? What Is the Best, E. G. Dexter, WW.
- Colonization, Dutch, Lessons from, J. W. Jenks, Int.
- Colonization in the Nineteenth Century, M. de Borchgrave, RGen.
- Color in the Word, E. Madeley, NC.
- Colorado, How Women Vote in, Mary C. C. Bradford, Pear.
- Commerce and Labor, New Department of, F. Emory, WW.
- Compromise, The Foe of, W. G. Brown, Atlant; Fort.
- Concord and Lexington, F. B. Sanborn, Ed.
- Congress, Some More Humors of, F. E. Leupp, Cent.
- Consumers' Leagues in America, Henriette J. Brunhes, RefS, March 15.
- Consumptives, Indigent, Treatment of, F. Mangini, RPar, March 15.
- Cookery, Flamboyant Period in, Elizabeth R. Pennell, Corn.
- Copyright Laws, Our Archaic, S. J. Elder, ALR.
- Corporations, National Control of, W. S. Logan, ALR.
- Cortelyou, George Bruce, D. S. Barry, WW.
- Cost Keeping for Moderate-Sized Shops, K. Falconer, Eng.
- Country, The Return to the—, Making a Summer Home; II., Wilderness Lodges, E. E. Holman, O.
- Cruiser, Making a, Out of a Ship's Longboat, A. J. Kenealy, O.
- Crusades, Devotional Study of the, J. A. B. Scherer, Luth.
- Cures and Humbugs of Europe, Famous, J. Ralph, Cos.
- Dahlia, The New Life in the, CLA.
- Dalny, a Flat-City, C. Cary, Scrib.
- Danger, Sense of, and the Fear of Death, G. R. Wilson, Mon.
- Dante, Quoting of, P. Bellezza, RasN, March.
- Davidson, Dr. Randall, C. T. Bateman, YW.
- Dead Letter Office, Joanna N. Kyle, Over, March.
- Death, Legend of, Among the Bretons, A. Le Braz, Int.
- Democracy and Political Parties, E. B. Smith, Dial, March 16.
- Democracy or Autocracy—Which? J. W. Bennett, Arena.
- Des Cartes and the Philosophy of the French Revolution, G. McDermot, ACQR.
- Dickens' "American Notes," "Martin Chuzzlewit," and "A Tale of Two Cities," and Their Contemporary Critics, A. B. Maurice, Bkman.
- Dickens, Thackeray and, Friendship of, G. R. Miller, Mun.
- Disease, Physiological Immunity from, C. Snyder, Harp.
- Diseases, Preventable Respiratory, J. O. Cobb, San.
- Disinfecting Stations, Floating, D. A. Willey, CasM.
- Dogs: The Alredale Terrier, J. Watson, CLA.
- Domestic Servant, A College Woman's Experiences as—, Lillian Pettengill, Ev.
- Drama, French, Development of the, B. Matthews, Int.
- Drama, Literary Critics and the, H. A. Jones, NineC.
- Drama of To-Day, Makers of the, B. Matthews, Atlant.
- Drama: The Popular Play, J. T. Smith, ACQR.
- Dramatic Realism, Modern, Fannie H. Gaffney, Arena.
- Duel, The, in Germany and Austria, R. C. B. von Echt, NineC.
- Easter in Many Lands, C. B. Taylor, Ev.
- Eastern Church, The, NC.
- Eddy, Mrs. Mary Baker, in Error, "Mark Twain," NAR.
- Edison, Thomas A.: How He Makes His Phonographs, W. B. Northrop, LeisH.
- Education: see also Kindergarten.
- Biography in the Schools, D. R. Major and T. H. Haines, PopS.
- Civil-Service Reform Principles in Education, Lucy M. Salmon, EdR.
- Co-Educated Girls, Ten, Two Hundred Years Ago, Mrs. H. M. Plunkett, Scrib.
- College, American, A Weakness in, C. F. Thwing, Lamp.
- Educational Outlook, O. H. Lang, Forum.
- Educators I Have Known, J. M. Greenwood, EdR.
- English, Teaching of, E. K. Broadus, Ed.
- English Popular Schools, F. W. Smith, Ed.
- Geometry, Psychological and Logical in, J. Dewey, EdR.
- Hour's Work Done by School Children, G. Bellei, EdR.
- Industrial Training in Rural Schools, A. Bayliss, Kind.
- Latin and Greek, Education in, C. Woeste, RGen.
- Literature, American, and the High Schools, J. M. Berdan, Arena.
- Moral Education in Public Schools, W. H. P. Faunce, EdR.
- New York, School No. 1 in, A. R. Dugmore, WW.
- Normal School, Passing of the, W. G. Chambers, Ed.
- Physical Education in the Universities, A. Mosso, Revue, April 1.
- Rome, Public Elementary Schools of, J. F. Reigart, EdR.
- Scholastic Profession, Prospects in the, Corn.
- Seven-Year Course of Study for Ward School Pupils, J. M. Greenwood, Ed.
- Southern College Curriculum, E. M. Banks, Meth.
- Southern Education, The Old and the New in, D. E. Cloyd, AMRR.
- Teaching, Talent Versus Training in, J. M. Rice, Forum.
- Women, Higher Education of, C. de Garmo, EdR.
- Electric Motor, Development and Use of the Small, F. M. Kimball, Eng.
- Electric Traction on Steam Railways, A. D. Adams, CasM.
- Electrical Developments in Russia, T. E. Heenan, CasM.
- Electricity: Alternating Current for Light and Power, C. F. Scott, CasM.
- Electricity, Healing by, J. H. Girdner, Mun.
- Emerson, Ralph Waldo: His Correspondence with Herman Grimm, Atlant.
- Employer's Obligation to Pay a Living Wage, J. A. Ryan, Cath.
- "Encyclopædia Biblica" and the Gospels, A. N. Jannaris, Contem.
- Energetics, Theory of, J. G. Hibben, Mon.
- England: see Great Britain.
- England, Haunted Roads in the West of, R. Carnsey, Temp.
- Ethics, Utilitarian, Domain of, G. L. Roberts, IJE.
- Evangelism, New Era in, D. R. Breed, PTR.
- Expatriation: Right of the American Citizen to Expatriate, G. B. Slaymaker, ALR.
- Fame, Posthumous and Contemporary, Dial, April 1.
- Far East, England and Russia in the, F. A. Ogg, Chaut.
- "Farm Colonies," Minnie J. Reynolds, CLA.
- Farm Colony at Hadleigh, England, Countess of Warwick, NineC.
- Farmer, The New England, H. C. Merwin, Ev.
- Farms, French, A. Girard, Arch.
- Fencing and Fencers, Stage, K. Bellew, O.
- Fencing, Art of, T. Lowther, NatR.
- Ferns, Native, for Shady Places, W. H. Taplin, CLA.
- Financial Affairs, A. D. Noyes, Forum.
- Finland, Situation in, I. A. Hourwich, JPEcon, March.
- Fire Walkers of Fiji, W. Burke, FR.
- Fish Commission, United States, C. H. Stevenson, NAR.
- Fiske, John, as a Popular Historian, H. M. Stephens, WW.
- Flamingoes in the Bahamas, O.
- Flood, What the Bible Teaches Concerning the, G. F. Wright, Hom.
- Florida, A Ship-Canal Across, Leonora B. Ellis, NatM.
- Flowers, Hardy Border, W. Falconer, CLA.
- Folk-Song: Its Influence Upon Classical Music, L. C. Elson, Int.
- Football, College, Accidents from, E. G. Dexter, EdR.
- Foreign Affairs, A. M. Low, Forum.
- Forest, How to Tell Direction in, and on Prairie, H. Kephart, O.
- Forest, The—IV., On Making Camp, S. E. White, Out.
- Forestry, Railroads and, J. Gifford, WW.
- Fort Riley, Kansas, Great New Camping and Exercise Ground at, L. L. Driggs, Mun.
- Fox, William Copp, the "Sauklee Poet," J. L. Wright, Era.
- France:
- Agricultural Associations, E. de Ghélin, RGen.
 - André, General, Ministry of, E. Mayer, BU.
 - Nancy, The "Good Shepherd" at, L. J. Maxse, NatR.
 - National Assembly, American Precedents in the, H. E. Bourne, AHR.
 - Press, The French, E. Pierret, RefS, March 1.
- Fur Seal as an International Issue, G. A. Clark, and D. S. Jordan, Int.
- Garden and Park, E. Schoen, Crafts.
- Garden, Next Summer's, E. E. Rexford, Lipp.
- Garden, Water, A Beginner's, C. F. Barber, CLA.
- Gardening, Market, in Vacant Lots, Jane A. Stewart, CLA.
- Gardens, English Pleasure, A. C. David, Arch.
- Gas, Natural,—the Ideal Fuel, J. T. Murphy, Cath.
- Geometry, Foundations of, P. Carus, Mon.
- Germany:
- Austria, Germany and, 1898-1900, G. Goyau, RDM, March 15.
 - German-American "Most Favored Nation" Relations, G. M. Fisk, JPEcon, March.
 - Navy, Evolution of the, E. Lockroy, RDM, April 1.
 - Policy of Emperor William, Fort.
 - Political and Social Methods, German, W. von Schierbrand, WW.
- Golf Ball, Flight of a, F. Broadbent, Str.
- Golf: Why It Has Improved, H. Hilton, O.
- Goodwin, N. C., J. E. McCann, FR.
- Gorky, Maxime, G. Savitch, Revue, March 15.
- Gospel Miracles and Modern Thought, J. B. Thomas, Hom.
- Granger Acts, Effects of the, C. R. Detrick, JPEcon, March.
- Great Britain: see also South Africa.
- Army Corps, Six, H. Cust, NatR.

- Army: The Times** and the Parliamentary Critics, Contem.
 By-Elections and Liberal Prospects, J. Shirley, West.
 Churchmen and Disestablishment, O. D. Watkins, Contem.
 Corn-Growing in British Countries, E. J. Dyer, NineC.
 Education Crisis, J. Bourdeau, RDM, March 15.
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 England, Depopulated, W. Stevens, LeisH.
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 Irish Land Laws, A. Miller, NineC.
 Irish Land Question, M. McD. Bodkin, Fort.
 Labor Party, Independent, J. K. Hardie, NineC.
 Liberal Eclipse, J. S. Mills, Fort.
 Liberalism and Labor, H. J. Darnton-Fraser, West.
 Licensing Question, Position of the, R. Hunter, NineC.
 Municipal Trading, The Case for, R. Donald, Contem.
 Naval Base, New, and Russian Designs, K. Blind, West.
 Old Age Pensions and Military Service, S. Low, Fort.
 Railway Monopoly at Work, F. Stopford, NatR.
 War Office: Past, Present, and to Come, A. Griffiths, Fort.
 Hale House Farm: An Experiment with Boys, G. W. Lee, NEng.
 Hamlet, Prince of Denmark, A. E. Gibson, Arena.
 Havemeyer, Henry Osborne, R. N. Burnett, Cos.
 Hawaii, Coffee Culture in, J. L. McClelland, Over, March.
 Health Made and Preserved by Daily Exercise, B. MacFadden, Cos.
 Henequen—the Yucatan Fiber, E. H. Thompson, NatGM.
 Henry I's Writ Regarding the Local Courts, G. B. Adams, AHR.
 "Henry VIII," A. F. Pollard's, G. Smith, NAR.
 Heredity in Royalty, Mental and Moral—IX., F. A. Woods, Pops.
 "History of the American People," Woodrow Wilson's, J. J. Tigert, Meth.
 Home Life: More Beauty for All, Caroline L. Hunt, Chaut.
 Horbeds, Prjevalski Wild, E. R. Sanborn, Pear.
 Hotbeds, How to Manage, P. O'Mara, CLA.
 Housing, Improved, for Wage Earners, F. G. Ford, SocS.
 Housing of the Working Classes, L. Jadot, Nou, March 15.
 Hughes, Hugh Price, W. Harrison, Meth.
 Human Life, Present Estimate of the Value of, R. Eucken, Forum.
 Ignorance, The Honorable Points of, S. M. Crothers, Atlant.
 Immigrants, Our: Whence Come They? W. E. Gordon, WW.
 Immigration, Large Foreign, Dangers in, J. B. Bishop, Int.
 India, To, with a Sketch-Book, L. R. Hill, PMM.
 Indian Baskets, Nevada, and Their Makers, Clara MacNaughton, OutW.
 Industrial Conditions: Are We Really Prosperous? Gunt.
 Industrial System, American, Shortcomings of the, G. N. Barnes, CasM.
 Interpretation, A Generic Method of, A. Roeder, NC.
 Interstate Streams, Rights to, R. P. Teele, JPEcon, March.
 Ireland: Connaught Homes, Emily Lawless, MonR.
 Ireland, Parties and Politics in, T. McCall, West.
 Irish Farmer, Hope for the, H. Plunkett, AMRR.
 Irish Historian of the Seventeenth Century, T. J. Shahan, ACQR.
 Iron Ore Mines of Biscay, B. H. Brough, CasM.
 Irrigation Act, Importance of the, C. E. Wantland, Gunt.
 Italy: Bologna-Florence Railway, E. de Gaetani, RasN, March 1.
 Italy, Municipalization of the Public Services in, A. Majorana, RSoc, March.
 James, Henry, Short Stories by, M. Schuyler, Lamp.
 Japan, Modern, Pessimistic Literature of, Revue, April 1.
 Japan, The New Woman in, E. W. Clement, AJS, March.
 Japanese Law and Jurisprudence, R. Masujima, ALR.
 Jefferson, Thomas, as a Lawyer, E. L. Didier, GBag.
 Jerusalem, New, Deep Foundation of the, H. C. Hay, NC.
 Jerusalem, Quarry-Caves of, C. A. White, Pops.
 Jesus Christ Versus His Apostles, W. C. Wilkinson, Hom.
 Jews in Palestine, Religious Life of, E. W. G. Masterman, Bib.
 "John Inglesant," MonR.
 "John Inglesant," The Author of, Dial, March 16.
 Johnson, Andrew, Recollections of, J. M. Scovel, NatM.
 Jones, Henry Arthur, M. C. Salaman, Cass.
 Judges, Criminal, in England, E. B. Bowen-Rowlands, PMM.
 Judicature, Federal, Century of—IV., Van V. Veeder, GBag.
 Jumping (on Horseback), M. V. Wynter, Bad.
 Kant's Analytic and Synthetic Judgments, J. H. Hyslop, Mon.
 Keats, John, S. A. Link, Meth.
 Kendall, George Wilkins, G. F. Mellen, Meth.
 Kindergarten:
 Dull Child, Prof. Earl Barnes on the Training of the, Jenny B. Merrill, KindR.
 Feeble-Minded, Education of the, J. B. Richards, KindR.
 Froebel, Friedrich, Albertine Wetter, KindR.
 Intervals, Games for, Katherine Beebe, KindR.
 Paper Cutting, Something New in, Caroline D. Aborn, KindR.
 Pennsylvania Kindergartens, Mrs. L. P. Wilson, Kind.
 Pittsburg, Work in, Georgia Allison, KindR.
 Purpose of the Kindergarten, Florence A. Kellogg, KindR.
 King, President Henry Churchill, J. H. Ross, Ed.
 Kingston, Rhode Island, P. K. Taylor, NEng.
 Komatsu, Prince, of Japan, J. H. Longford, NatR.
 Labor Department in Industrial Establishments, Working of a, C. U. Carpenter, Eng.
 Labor Question, Political Economy and the, J. H. Hollander, NAR.
 Labor: The Waterbury Injunction, Gunt.
 Lace Industry, Clementine Black, MonR.
 Laestrygons, Land of the, F. Mathew, Mac.
 Lafayette's Last Visit to America, T. Stanton, Lipp.
 Landscape Gardening, J. Reinhard, Crafts.
 Law, International: Its Place in American Jurisprudence, J. B. Scott, GBag.
 Lawn Tennis, Masters of, Miss T. Lowther, Bad.
 Lemons, American, Growing, W. S. Harwood, WW.
 Leo XIII., Pope, F. Paronelli, FRL.
 Leo XIII. and His Counselors, E. Philippe, BU.
 Letter E, Significance of the, B. Sparhawk, Mind.
 Life After Death, F. Harrison, NineC.
 Life Insurance in New England, H. H. Putnam, NEng.
 Life-Satisfaction, On, W. Karapetoff, AJS, March.
 Lincoln (Abraham) Literature, Outline of, Lina B. Reed, Dial, March 16.
 Literary Frauds, Curious, E. W. Mayo, Era.
 Literature, English: Why It Is Dying, W. M. Lightbody, West.
 Literature, Life Outdoors and Its Effect Upon, Mabel O. Wright, Crit.
 Living, Simpler, A Plea for, S. M. Jones, Arena.
 Lloyds, the Great Marine Insurance Company, C. Roberts, WW.
 Loans, Stored Goods as Collateral for, A. M. Read, BankNY.
 London Fountains, F. M. Holmes, Cass.
 London, Unemployed of, H. Dagan, Nou, March 1.
 Longfellow, Henry W., Letters of, Harp.
 Louisville, Kentucky, W. S. Bodley, NatM.
 Lutheran Church, Obligations of Other Communions to the, P. Anstadt, Luth.
 Lyon, Col. Matthew, Incidents in the Life of, J. F. McLaughlin, Cent.
 Macedonian Claimants, W. Miller, Contem.
 MacTaggart, John McT. E., Ethical Principles Maintained by, G. E. Moore, IJE.
 Magical Illusions, Sensational—II., Str.
 Magellan's Straits, Through, A. H. Goddard, Cass.
 Maintenon, Madame de, Mrs. Chapman, Fort.
 Malaria: Its Relation to Agriculture and Other Industries of the South, G. W. Herrick, Pops.
 Malaya, Human Tree-Dwellers of, C. Whitney, O.
 Malta, W. Knight, Fort.
 Man, The Making of, G. Macloskie, Hom.
 Manhood in the Making—VI., H. G. Wells, Cos; Fort.
 Man's Place in the Universe: A Reply, H. H. Turner, Fort.
 Markham, Edwin, Sketch of, C. B. Patterson, Mind.
 Marriage, A True and a False Philosophy of, NC.
 Mary Magdalen: Who Was She? H. Pope, ACQR.
 Masters of Their Craft, A. Kirk, McCl.
 Mazzini, The Message of, B. O. Flower, Arena.
 Medicine as a Profession, G. F. Shears, Cos.
 Mennonites and Dunkers in Pennsylvania, E. W. Hocker, Era.
 Metal Cutting with the New Tool Steels, O. Smith, Eng.
 Methodist Church, Thank-Offering of the, E. M. Mills, WW.
 Methodist Hymnology, W. F. Tillett, Meth.
 Mexican Girls, Some, Amanda Mathews, Over, March.
 Mexico, Men and Affairs of Modern—VII., S. G. Andrus, NatM.
 Millionaires. The Richest Americans, H. Sutherland, Mun.
 Mine Accounting, General Principles of, E. Jacobs, Eng.
 Mine, Modern Gold, A Day at a, E. Mayo, Pear.
 Missions:
 Bible in the Missionary Meeting, Belle M. Brain, MisR.
 Bible, Translations of the, A. E. Colton, MisH.
 Burma, Christian Missions in, T. Ellis, MisR.
 China, Missionary Methods in, T. Richard, MisR.
 Education, Higher, and Permanent Evangelization, J. L. Barton, MisH.
 India, Christian Occupation of, H. P. Beach, MisR.
 Italy, Religious Outlook in, J. G. Gray, MisR.
 Japan, Union and Federation in, J. D. Davis, MisH.
 Kongo, Among the Mongos of the, MisR.
 Madras Decennial Conference, G. H. Rouse, MisR.
 Siam and Laos, Movement Toward Self-Support in, A. J. Brown, MisR.
 Tibet, On the Frontiers of, J. Johnston, MisR.
 Monroe Doctrine, Application of the, by Europe, R. S. Guernsey, Gunt.
 Monroe Doctrine: Is It a Bar to Civilization? NAR.
 Monroe, James: His Declaration of the Monroe Doctrine, A. H. Lewis, Ev.
 Monterey Before the Gringos Came, R. L. Sandwick, Over, March.
 Mormonism, Economic Aspects of, R. T. Ely, Harp.
 Morris, William, Elizabeth Luther Cary's Study of, Irene Sargent, Crafts.
 Mosquitoes, Warfare Against, L. O. Howard, CLA.

- Municipal Programme, An American, C. R. Woodruff, PSQ.
 Municipal Trading in England, R. Donald, Contem.
 Musical Celebrities, Modern, H. Klein, Cent.
 Myers, F. W. H., Gospel of, W. H. Mallock, NineC.
 Napoleon, Example of, D. A. Merrick, ACQR.
 Napoleon on America and the Americans, L. Rosen, Fort.
 Napoleon, The Outwitted of, H. W. Wilson, Corn.
 Napoleon, The Young—IV., Viscount Wolsley, Cos; PMM.
 Natural Religion, Problem of, J. Royce, Int.
 Nature, Books About, H. C. Merwin, Scrib.
 Navy, The New American—VI., J. D. Long, Out.
 Negro and Public Office, J. B. Bishop, Int.
 New England Farmer, H. C. Merwin, Ev.
 New England Gas and Coke Company, A. D. Adams, JPEcon.
 New Testament, Interpretation of the, H. Gunkel, Mon.
 New York City:
 Beggars of New York, J. J. Goodwin, Mun.
 Dutch Founding of New York—III., T. A. Janvier, Harp.
 Flat-Dwellers of New York, A. B. Paine, WW.
 Jerome Versus Crime—J., H. Davis, Pear.
 Lecture System, Free, G. Hies, WW.
 School No. 1 ("New Citizens for the Republic"), A. R. Dugmore, WW.
 New York, Elections in, in 1774, C. Becker, PSQ, March.
 New Zealand—Political, Social, and Religious, J. M. Peebles, Arena.
 Newfoundland Difficulty, French Side of the, J. C. Bracon, NAR.
 Newspaper, English Illustrated Weekly, J. M. Bulloch, Lamp.
 Newspaper, The Modern, Mac.
 Nile Dams and Reservoir, B. Baker, PopS.
 Oarsman, University, Making of, J. J. Rogers, Jr., O.
 Ohio, A Century of the State of, M. Halstead, AMRR.
 Old Testament Traditions, Earlier, Study of, Sarah A. Emerson, Bib.
 Opera, New Régime for, L. Reamer, AMRR.
 Operatic Season, Lessons of the, J. Sohn, Forum.
 Operatic Stage, Beauty on the, F. Dean, Mun.
 Order in the New-Church Doctrines, J. Whitehead, NC.
 Ouida—An Estimate, F. T. Cooper, Bkman.
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Abbreviations of Magazine Titles used in the Index.

[All the articles in the leading reviews are indexed, but only the more important articles in the other magazines.]

ACQR. American Catholic Quarterly Review, Phila.	Ed. Education, Boston.	NC. New-Church Review, Boston.
AHR. American Historical Review, N. Y.	EdR. Educational Review, N. Y.	NEng. New England Magazine, Boston.
AJS. American Journal of Sociology, Chicago.	Eng. Engineering Magazine, N. Y.	NineC. Nineteenth Century, London.
AJT. American Journal of Theology, Chicago.	Era. Philadelphia.	NAR. North American Review, N. Y.
ALR. American Law Review, St. Louis.	EM. España Moderna, Madrid.	Nou. Nouvelle Revue, Paris.
AMonM. American Monthly Magazine, Washington, D. C.	Ev. Everybody's Magazine, N. Y.	NO. Nova Antologia, Rome.
AMRR. American Monthly Review of Reviews, N. Y.	Fort. Fortnightly Review, London.	OC. Open Court, Chicago.
ANat. American Naturalist, Boston.	Forum. Forum, N. Y.	O. Outing, N. Y.
AQ. American Quarterly, Boston.	FrL. Frank Leslie's Monthly, N. Y.	Out. Outlook, N. Y.
AngA. Anglo-American Magazine, N. Y.	Gent. Gentleman's Magazine, London.	OutW. Out West, Los Angeles, Cal.
Annals. Annals of the American Academy of Pol. and Soc. Science, Phila.	GBag. Green Bag, Boston.	Over. Overland Monthly, San Francisco.
Arch. Architectural Record, N. Y.	Gunt. Gunton's Magazine, N. Y.	PMM. Pall Mall Magazine, London.
Arena. Arena, N. Y.	Harp. Harper's Magazine, N. Y.	Pear. Pearson's Magazine, N. Y.
AA. Art Amateur, N. Y.	Hart. Hartford Seminary Record, Hartford, Conn.	Phil. Philosophical Review, N. Y.
AI. Art Interchange, N. Y.	Hom. Homiletic Review, N. Y.	PhoT. Photographic Times-Bulletin, N. Y.
AJ. Art Journal, London.	IJE. International Journal of Ethics, Phila.	PSQ. Political Science Quarterly, Boston.
Atlant. Atlantic Monthly, Boston.	Int. International Quarterly, Burlington, Vt.	PopA. Popular Astronomy, Northfield, Minn.
Bad. Badminton, London.	IntS. International Studio, N. Y.	PopS. Popular Science Monthly, N. Y.
BankL. Bankers' Magazine, London.	JMSI. Journal of the Military Service Institution, Governor's Island, N. Y. H.	PTR. Princeton Theological Review, Phila.
BankNY. Bankers' Magazine, N. Y.	JPEcon. Journal of Political Economy, Chicago.	QJEcon. Quarterly Journal of Economics, Boston.
Bib. Bibliotheca Sacra, Oberlin, O.	Kind. Kindergarten Magazine, Chicago.	QR. Quarterly Review, London.
BU. Bibliothèque Universelle, Lausanne.	KindR. Kindergarten Review, Springfield, Mass.	RasN. Rassegna Nazionale, Florence.
Black. Blackwood's Magazine, Edinburgh.	LHJ. Ladies' Home Journal, Phila.	RefS. Réforme Sociale, Paris.
BL. Book-Lover, N. Y.	Lamp. Lamp, N. Y.	RRL. Review of Reviews, London.
Bkman. Bookman, N. Y.	Leish. Leisure Hour, London.	RRM. Review of Reviews, Melbourne.
BP. Brush and Pencil, Chicago.	Lipp. Lippincott's Magazine, Phila.	Revue. Revue, Paris.
CDR. Camera and Dark Room, N. Y.	LQ. London Quarterly Review, London.	RDM. Revue des Deux Mondes, Paris.
Can. Canadian Magazine, Toronto.	Long. Longman's Magazine, London.	RGen. Revue Générale, Brussels.
Cass. Cassell's Magazine, London.	Luth. Lutheran Quarterly, Gettysburg, Pa.	RPAr. Revue de Paris, Paris.
CasM. Cassier's Magazine, N. Y.	McCl. McClure's Magazine, N. Y.	RPP. Revue Politique et Parlementaire, Paris.
Cath. Catholic World, N. Y.	Mac. Macmillan's Magazine, London.	RSoc. Revue Socialistic, Paris.
Cent. Century Magazine, N. Y.	MA. Magazine of Art, London.	Ros. Rosary, Somerset, Ohio.
Chan. Chambers' Journal, Edinburgh.	Meth. Methodist Quarterly, Nashville.	San. Sanitarian, N. Y.
Chaut. Chautauquan, Springfield, O.	MethR. Methodist Review, N. Y.	School. School Review, Chicago.
Contem. Contemporary Review, London.	Mind. Mind, N. Y.	Scrib. Scribner's Magazine, N. Y.
Corn. Cornhill, London.	MisH. Missionary Herald, Boston.	SR. Sewanee Review, Sewanee, Tenn.
Cos. Cosmopolitan, N. Y.	MisR. Missionary Review, N. Y.	SocS. Social Service, N. Y.
CLA. Country Life in America, N. Y.	Mon. Monist, Chicago.	Str. Strand Magazine, London.
Crafts. Craftsman, Syracuse, N. Y.	MonR. Monthly Review, London.	Temp. Temple Bar, London.
Crit. Critic, N. Y.	MunA. Municipal Affairs, N. Y.	USM. United Service Magazine, London.
Deut. Deutsche Revue, Stuttgart.	Mun. Munsey's Magazine, N. Y.	West. Westminster Review, London.
Dial. Dial, Chicago.	Mus. Music, Chicago.	WPM. Wilson's Photographic Magazine, N. Y.
Dub. Dublin Review, Dublin.	NatGM. National Geographic Magazine, Washington, D. C.	WW. World's Work, N. Y.
Edin. Edinburgh Review, London.	NatM. National Magazine, Boston.	Yale. Yale Review, New Haven.
	NatR. National Review, London.	YM. Young Man, London.
		YW. Young Woman, London.